

VIRGINIA WILDLIFE

MARCH 1991

ONE DOLLAR



Editor's Page

Last fall, while working in this Agency's State Fair exhibit, surrounded by photos of furry animals, information on fish and wildlife management, and clad in the comforting garb of a fish and wildlife official, I started to stammer and then fell silent after I asked a man if he hunted and he replied, "No, I just enjoy watching the wildlife around my house. I don't like to kill anything."

I guess I could have given the man a very sensible sermon on how important hunting is to maintain healthy wildlife populations, and how the support of hunters and fishermen have actually protected and increased Virginia's wildlife, but frankly I'm tired of those kinds of arguments. It makes me mad that I hesitate to simply smile and say "I hunt because I like to," because I'd rather not risk offending someone's personal sensibilities about life and death.

These days, I am being forced to face the fact that hunting is losing ground as a universally comfortable topic of discussion. My mother used to say it was impolite to discuss religion or politics at the dinner table. Personally, my feeling is that if you add hunting to that list of unmentionable dinner conversations, you might as well eat alone.

Still, the fact that we hunters are having to defend ourselves more and more these days is a bit unnerving. A friend recently sent me a *Washington Post* article entitled "Armchair Activism: For Couch Potatoes, Easy Ways to Save the Earth." The writer included many "in vogue" ways to save the Earth, like not buying ivory, using biodegradable laundry soap and using "dial-a-cause" phone numbers. He also included a segment on how to get involved in the animal rights movement. Hunting was noticeably

absent as a meaningful activity in the quest to save the Earth. That hurt, especially when you realize how quickly the public has forgotten where the money for wildlife restoration has come from in this country for the past 50-odd years.

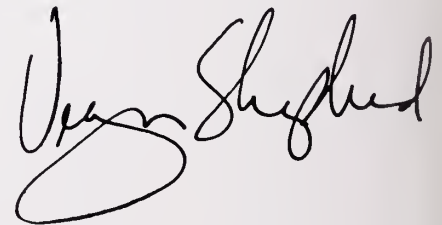
Oh, well, one can overlook rudeness born of ignorance. It's much more worrisome to realize that the media is starting to act scared of even tackling the subject of hunting. *Harrowsmith County Life*, a magazine devoted to rural living, recently found it necessary to defend its position to publish articles on hunting. "Hunting is definitely one of those topics about which people have preconceived notions," the editor began. "That makes it a dangerous subject to cover to the satisfaction of many subscribers—almost taboo . . . But no matter what your bias about it is, hunting has long been a central element in rural culture; sometimes the risks of upsetting a few are worth the opportunity to inform others about such crucial matters."

Maybe instead it's time to stop apologizing. After all, I'm not sure why I should feel guilty because I had a grand time last season hunting deer in Southampton County. Down there, I was put on a stand where I waited for two to three hours watching sparrows flitting from bush to bush and never saw a deer, except maybe 200 yards in the distance. But even so, I heard the dogs singing, tearing up the woods with their howls. And when it got to be about lunchtime, I was picked up and taken to the clubhouse where the place was crawling with kids in camouflage with long drag ropes tied around their waists, wearing blaze orange hunt club hats too big for them that bent their ears straight out, but they wouldn't take them off for the world. Tailing their

dads or their granddads on this special "Kid's Day Hunt," they imitated their walks and nodded along with them over the big deer that had been brought in. I'm not sure why I should feel bad about seeing three generations or more of families and friends down there making a big deal over a lunch of bar-b-que and hot dogs and potato chips and iced tea and watching John Elwood Fox smile as he looked around and said, "These kids look forward to this day more than they do Christmas."

Then again, maybe I should feel guilty, because what sticks out in my mind is not so much that doe I killed this year, but the fact that my friend Evan couldn't keep from giving me a bear hug when he saw I had made a clean kill with one shot, especially after he and the other men had spent hours walking through briars and swamps and pine thickets yelling their heads off trying to drive deer toward the folks on stands.

No, I'm through making excuses. Our reasons for hunting are not biological, scientific, or logical. That our reasons are jumbled up in our hearts and are often difficult to articulate is not reason enough to apologize.



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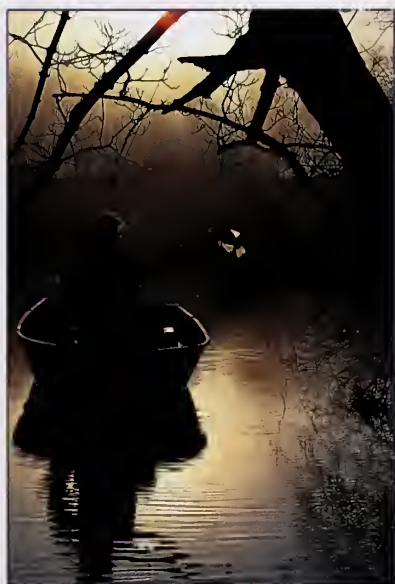
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Trout season opens March 16; refer to our 1991 "keeper" trout guide for details—p. 11.



VIRGINIA WILDLIFE



Cover: It's time to start thinking about getting out on the water. Why not try the Staunton River?—p. 8; photo by Soc Clay.

Back cover: photo by Michael Simon.

Right: Chincoteague ponies are just one of the attractions of Chincoteague Island—p. 4; photo by Michael P. Gadomski.

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A Gathering of Artists



photo by Shirley Whitenack

Chincoteague's annual Easter Decoy and Arts Festival hosts 4,000 visitors each year in a celebration of the waterfowl and wildlife traditions of the Eastern Shore.

by Gregory Pels

“Now this little house here is called a mosquito house.” Bob Booth, a local Chincoteague Island carver smiled while looking at what appeared to be a tiny bird house suspended on a thin wire. “If you hang this mosquito house on your porch,” he said, “any mosquito passing by will know that you are a friend to mosquitoes, and will leave you alone and bite your neighbor instead.” Bob repeated this and other stories about life on the water while living on Virginia’s Eastern Shore to the onlookers who were part of the many spectators attending last year’s annual Easter Decoy and Arts Festival on Chincoteague Island.

Chincoteague, made famous by Marguerite Henry’s delightful children’s story *Misty of Chincoteague* which immortalized its annual wild pony penning event, and fondly remembered on “Wild Kingdom” by the late Marlin Perkins in his televised show featuring the “Wild Ponies of Assateague Island,” is also host to several annual festivals. One such event, the Easter Decoy and Arts Festival, officially opens the tourist season each spring.

Taking place at the local high school and elementary school, laughter and conversations fill the crowded exhibit areas. Exhibits line the halls as craftsmen from throughout the country demonstrate and explain their talents to the people who have gathered for this annual event. Rows upon rows of displays, working artisans, decoys, exquisitely carved birds, paintings and photographs all unfold before the visitor.

Bob Booth was one of over 112 carvers and wildlife artists who participated in the festival last April. An estimated 4,000 visitors viewed the exhibits and demonstrations at the festival sponsored annually by the Chincoteague Chamber of Commerce with assistance from the Chincoteague Carver’s Association.



Local carver Bob Booth illustrates his decoy carving techniques at last year’s Easter Decoy and Arts Festival; photo by Gregory Pels.



"I make my carvings from real life observations," recalls Booth who has lived, worked, and hunted on the Eastern Shore his entire life. Unlike the very realistic carvings that many carvers are making today, Booth prefers to continue in the "old style" of carving, with smooth lines and subtle painting.

While walking among the various exhibits, I was struck by the lifelike details carved and finely painted into the replicas of many birds familiar to me. As I approached one exhibit, I was particularly impressed with the details carved and painted into a great horned owl. Placed on a roost in a tree, one would have a difficult time differentiating a real owl from Roy Bohn's exquisite carving. Traveling from Pennsylvania to participate in this year's festival, Roy Bohn's carvings, unlike Booth's, reflect subjects in precise detail from accuracy of scale to color and the minute details in the feathers. Bohn, who has been carving since he was 11 years old,

Above: Roy Bohn of Pennsylvania was one of over 112 carvers and wildlife artists exhibiting at last year's Chincoteague Easter Decoy and Arts Festival. Right: How realistically a decoy floats on the water is one of the criteria for the judging of working decoys at the Easter Decoy and Arts Festival; photos by Gregory Pels.



prefers to carve upland game birds, shorebirds, ducks, and owls. He works mostly with traditional carving knives and chisels, and can easily spend 40-60 hours on a duck decoy such as a mallard. Bohn hand paints his carvings with acrylics.

According to Jacklyn Russell, Director of the Chincoteague Chamber of Commerce, the first festival was held nine years ago with the

intent of featuring Chincoteague artists and carvers. Over the years, however, the festival has expanded, with carvers coming from as far as California to participate in the event. The majority of artists and carvers come from Eastern states, but the popularity of the festival continues to grow among artisans. However, the original purpose of the annual event to feature Chincoteague artists and

carvers still remains. In holding true to this tradition, last year's featured carver was Reggis Birch and featured artist was Donnie Thornton, both of Chincoteague.

Following the style of Mark McNair, Birch says his lifesize decoys are carved in a style he considers "archaic." His works are carved "in the old tradition and are replicas of old birds," similar to those carved at the turn of the century. Birch adds, "I'm the only one who does what I do on Chincoteague."

Whether it's his style or technique, Birch must be doing something right, because his decoys have been sought by collectors from as far

carves from 60 to 160 decoys each year and "I don't get tired of it." Using a hatchet, knife, and rasps to fashion his birds, Birch does all of his own work on each carving, from cutting to painting. Over the years, Birch's competitive grade hunting decoys have won more than 130 ribbons, (42 for first place) and his displays have won the top prize at the 1987 and 1988 Chincoteague Easter shows.

Thornton, on the other hand, is known locally for his beautifully painted wildlife scenes on canvas and sand dollars. The grandson of Tom Reed, long regarded as Chincoteague's leading naturalist, Thornton

colors, acrylics and pen-and-ink drawings. Although he depicts a variety of wildlife, his favorite subjects are songbirds. "I've always liked songbirds and feel comfortable painting them," he says.

Paintings and carvings aren't the only featured exhibits at the festival. Outside the main exhibit area, a large group of spectators gather around a water-filled tub full of decoys. Judges with long sticks prod at the decoys, intent on moving them around the tub. Finally, the judges select the three working decoys they consider the best, basing their decisions on color, shape, and floating accuracy.

The Decoy Festival is open to exhibitors throughout the United States. Exhibits include carvings, painting, photography and other wildlife crafts. To become an exhibitor, artists must submit slides of their work which are juried by professional carvers and artists. Only the best entries are invited to participate.

If you are an outdoor enthusiast and would like to visit the Eastern Shore, there are other special events held on Chincoteague Island, including the annual Pony Swim in July, the Oyster Festival in October, and the Assateague Island Waterfowl Week in November.

Whether you're visiting Chincoteague or nearby Assateague Island during one of these events or on another occasion, you will be sure to find entertainment for the entire family. There are many opportunities for fishing, hunting, cycling, hiking, birdwatching, photography, or just plain relaxing. On Assateague Island National Seashore you can observe nature at its finest as the island's wetlands serve as habitat for many migrating species of waterfowl.

The 1991 Decoy Festival will be held on March 30-31. For further information call or write to the Chincoteague Island Chamber of Commerce, P.O. Box 258, Chincoteague, VA 23336, (804) 336-6161. □

Gregory Pels is the director of the University of Virginia's Continuing Education, Richmond Center.



Full of exquisite decoy carvings and other wildlife art, the Easter Decoy and Arts Festival in Chincoteague will be held this year on March 30-31; photo by Gregory Pels.

away as Sweden, Japan, British Columbia, and Germany, as well as throughout the United States, and sell for as much as \$2,100 each.

Birch, who recently gave up a job in the insurance business to become a full-time carver, estimates that he

has developed a healthy respect for wildlife and the environment. Reed was able to pass along his interest in conservation and the great outdoors to young Thornton and his influence is clearly evident in his grandson's paintings. Thornton paints water-



A Staunton River Guide

by Michael C. Duval

The Staunton River is located in south-central Virginia and forms the boundaries of Campbell, Pittsylvania, Halifax, and Charlotte counties. Actually an 81-mile segment of the Roanoke River, the Staunton River begins at Leesville Dam and continues to the confluence with John H. Kerr Reservoir.

Bird watchers, anglers, and hunters will enjoy the bounty of the river and its adjacent bottomlands. Canoeists can experience the challenging Fish Trap (Class III) and Cat Rock (Class II) rapids. In addition, an abundance of flat water is available for those individuals seeking a more relaxing trip down the river. Large sections of the Staunton River also are accessible to motorboats.

The bottomlands bordering the river are largely undeveloped and are under ownership of individuals,

paper companies, or municipalities. River users should control litter and seek landowner permission prior to camping or picnicking on the river banks. Common courtesy is requested of river users.

Access Points Leesville Landing

Leesville Landing is located at the end of Route 754 off US 29 near Motley in Pittsylvania County.

Access is provided to Leesville Reservoir at the dam. However, no access is available to the dam tail-water area.

Fishery resources include year-round angling for walleye, striped bass, white bass, largemouth bass, various catfish species, and Roanoke bass (a larger cousin of the rock bass).

Be aware of widely fluctuating water levels, abundant logs and other floating debris in the lake. Boaters are urged to dress appropriately for the

weather and carry emergency supplies.

Leesville Fishing Area

The Leesville Fishing Area is located on the north side of the river below Leesville dam and is reached by taking Route 630 from HW 43 and following to the end of Route 718.

The Leesville Fishing Area provides access for bank fishing only within the tailwater of Leesville Dam. Fishing is restricted to the walkway behind safety railings. No wade fishing or boat and canoe launching is permitted.

Fishing opportunities include seasonal spawning runs of walleye, striped bass, and white bass. Some walleye apparently hold in the tailwater year-round. Catfish, including larger flathead catfish, can be caught in the tailwater pool from the spring through fall.

Anglers are advised to adhere to all rules as posted at the parking area. Rapidly rising water levels require special attention. Respond to all warning sirens by moving to higher ground until water levels stabilize.

Long Island to Brookneal (11.0 miles)

This trip covers all 11 miles of the designated state scenic river segment of Staunton River.

Launch on north side of river at the DGIF Long Island ramp off Route 761, reached by taking Route 633 approximately 1.5 miles north of Brookneal on US 501. Take out at DGIF ramp located off US 501 at Brookneal.

This ramp provides access for canoes and motorboats. Riffles both above and below the Long Island ramp limit motorboats to 1.5 miles of navigable rivers.

Fishery resources include seasonal runs of walleye, striped bass, white bass, and suckers. Catfish can be found in deeper holes. Smallmouth bass and Roanoke bass are common in this section, particularly around riffles and other rocky habitat.

This stretch of river includes difficult rapids (Classes II and III) that should not be attempted by novice canoeists.

Brookneal to Watkins Bridge (28.6 miles)

This is a particularly long float for canoes and should be planned as an overnight trip. Of course, landowner permission must be obtained prior to camping on private land along the river.

Launch at DGIF ramp located off US 501 at Brookneal and take out at Watkins Bridge (Rt. 746) north of Clover. An alternate takeout point for canoes is located at Clarkston bridge (Rt. 620) some 7 miles downstream of Brookneal; however, no ramp is provided and boaters must carry canoes out along the highway right-of-way.

From the Brookneal ramp, motorboats have nearly 38 miles of navigable river available. Flat water with a mild current during normal summer flows makes for pleasant canoeing.

Seasonal spawning runs of walleye, striped bass, white bass, and suckers can be expected in this stretch. Flathead catfish and other catfish species are common as well. Kentucky spotted bass and Roanoke bass are occasionally caught by anglers.

Sandbars alternately protrude into the channel and could be a hazard to motorboat operators. Boaters should pack emergency supplies when boating on this section of the Staunton River in the event of capsizing.

Watkins Bridge to US 360 (8.9 miles)

Launch from DGIF ramp at Watkins Bridge (Rt. 746) north of Clover. Take out at DGIF ramp adjacent to US 360E.

Access is provided for canoes and motorboats. Nearly 38 miles of navigable river are available for motorboats. Mellow current at normal summer flows can be expected.

Seasonal spawning runs of walleye, striped bass, white bass, and suckers pass through this stretch. Various catfish species occur here and occasional catches of Kentucky spotted bass and Roanoke bass are reported.

Boaters should be cautious of alternately situated sandbars and a

minor riffle located downstream from the HW 92 bridge.

US 360 to State Park Ramp (12.3 miles)

This section of the Staunton River should be planned as an overnight trip for canoeists. Landowner permission must be obtained prior to camping on private land along the river.

Launch from DGIF ramp off US 360E. Take out at Staunton River State Park ramp at the end of HW 344 off US 360.

The river is accessible to both canoes and motorboats. Thirteen navigable miles of river are available. Slow, flat water characterizes this stretch. Up to 4.5 miles of still water must be crossed where the river meets the lake to reach the state park ramp.

Seasonal fishing for migrating walleye, suckers, striped bass, and white bass occurs here. Catfish, gar, largemouth bass, and crappie also offer angling action. Waterfowl, wading birds, and raptors (osprey and bald eagles) are abundant amongst the many islands at the confluence with the lake.

Sandbars and sand shoals are potential navigation hazards to motorboat operators. Boaters may become disoriented by the multiple channels at the river delta.

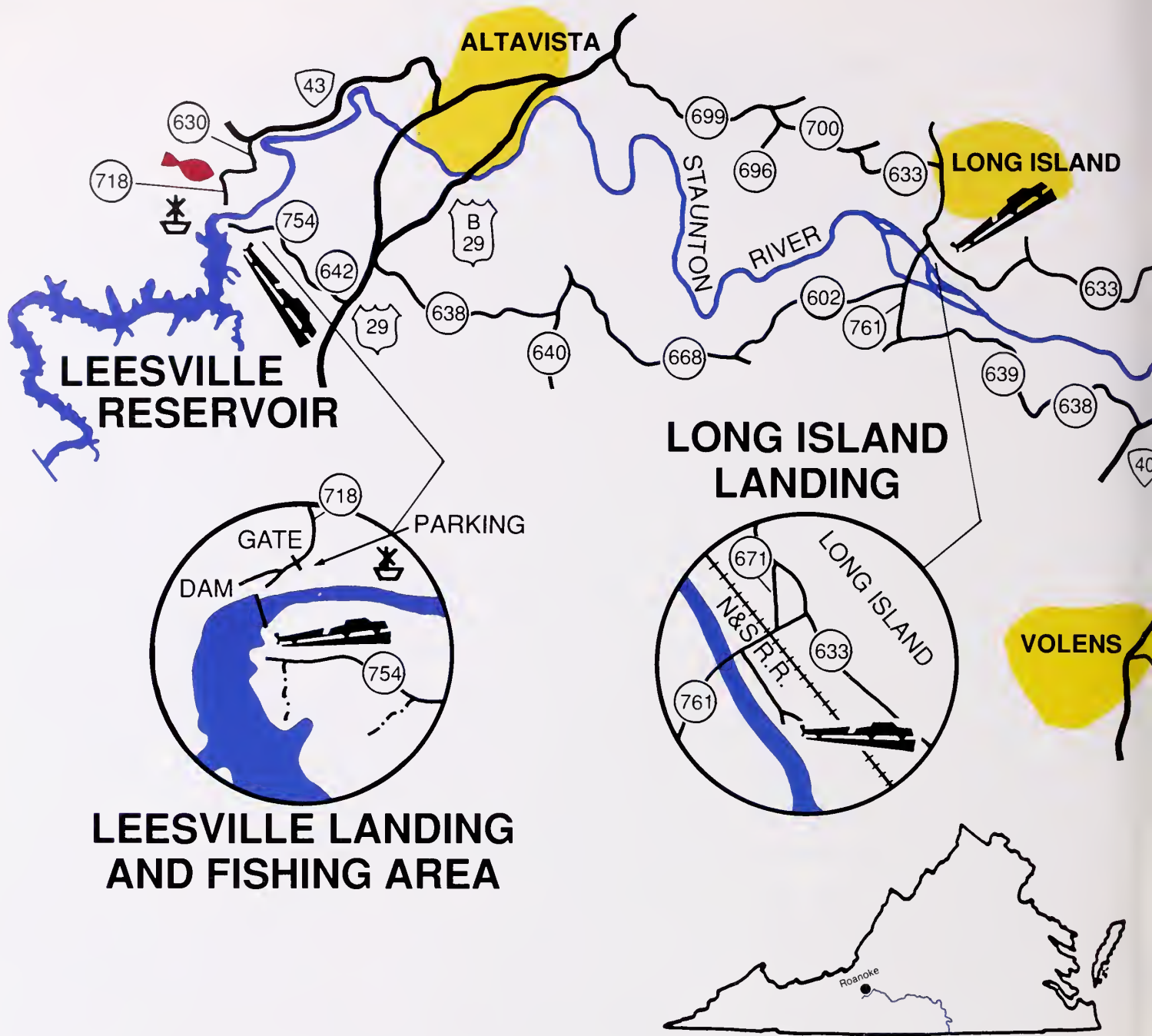
Staunton River State Park

Launch at Staunton River State Park ramp at the end of HW 344 off US 360.

Access for canoes and motorboats is provided to John H. Kerr Reservoir and the Staunton River delta.

Spawning runs of walleyes, suckers, striped bass, and white bass pass through this area seasonally. Catfish, largemouth bass, and crappie are attractive angling prospects. Bow hunting for carp and gar is productive in the river delta.

Strong, easterly winds can generate hazardous wave conditions for boats. Braided channels within the river delta can be disorienting. Sand shoals are abundant upstream of the ramp and may be a navigational hazard to motorboat operators. □



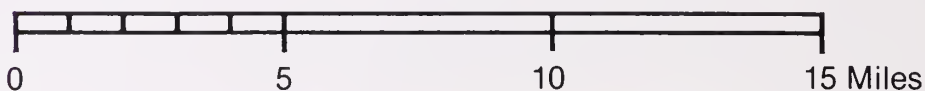
ROANOKE (STAUNTON) RIVER PUBLIC ACCESS



Shoreline fishing access



No fishing, wading, or use of boats is allowed in river from Leesville Dam downstream 840 feet to an overhead cable. Fishing is permitted from behind safety railings at the Leesville Dam fishing structure.



A detailed watercolor illustration of a rainbow trout, characterized by its yellowish-brown upper body with dark spots and a vibrant pinkish-red lateral stripe. The fish is shown in profile, facing right, with its mouth slightly open as if about to swallow a small fly. A thin white fishing line extends from the top left corner of the frame, passing over the trout's back and ending near its head. The background consists of layered, textured washes of blue, grey, and green, suggesting a rocky riverbed or a misty mountain landscape. The overall style is artistic and naturalistic.

Trout Guide 1991

Virginia Department of Game and Inland Fisheries

Introduction

Virginia contains over 2,700 miles of trout streams in addition to numerous ponds, small lakes and reservoirs. The total includes over 2,100 miles of wild trout streams and about 600 miles of water inhabited with stocked trout. Virginia's diversified trout habitat offers a wide range of trout fishing opportunities.

Virginia's warm climate and topography generally limit trout habitat to the western portion of the state. The Blue Ridge and Allegheny Mountains provide the elevation to maintain low water temperatures year-round, while the valley between these ranges contains the unique limestone formations necessary to produce highly productive spring creeks.

Trout management in Virginia consists of three basic programs. The put-and-take stocking program is the best known and most popular. Such waters are periodically stocked with catchable size trout, most of which are caught within a short time period. The ease with which the stocked trout are captured is probably the main reason for the program's popularity.

The wild trout program includes the management of reproducing populations of brook, rainbow and brown trout. Efforts are directed primarily at habitat preservation and proper regulation for protection of spawning stocks.

The put-n-grow-n-take program involves sublegal trout stockings. This relatively small program is rapidly growing in size and popularity due to the high quality trout fishing provided.

Trout season in Virginia is open from the third Saturday in March through February 1. Fishing success for wild and stocked trout is best from April through mid-June. After this period, warm weather and normally low flow conditions make fishing more difficult. The dedicated

fisherman, however, can find good trout fishing opportunities throughout the year.

In 1975, the Department of Game and Inland Fisheries initiated a project to survey the entire trout region of the state. The purpose of this survey was to fully identify the trout resource in order to provide habitat protection, insure that proper regulations have been implemented, and offer the best stocking program possible. The result of this survey was the discovery of a fine wild trout resource, implementation of new statewide trout regulations, and greater diversification of Virginia's trout fishing opportunities.

Fee Fishing Areas

The fee fishing areas offer put-n-take trout fishing with the added advantage that trout are stocked several times weekly throughout the season. The fee fishing program operates from the first Saturday in April through Labor Day, during which time a daily permit is required in addition to a valid state fishing license. A trout license is not required during this period. After Labor Day, regulations at the fee areas revert to general trout regulations and a trout license is required. The creel limit at these areas is five fish per day at all times.

Clinch Mountain Fee Fishing Area:

The Clinch Mountain Fee Fishing Area is located in southwest Virginia, about 7 miles west of Saltville. The area consists of the 330-acre Laurel Bed Lake and approximately seven miles of Big Tumbling Creek and its two major tributaries, Briery Cove Creek and Laurel Bed Creek. Big Tumbling Creek is a large, steep gradient stream with numerous small waterfalls and large, deep rocky pools. The two tributaries are much smaller with a more moderate gradient. The lake provides a put-n-grow-n-take trout fishery and is used to regulate summer flow in the streams. Trout



are stocked daily throughout the fee period in the streams and fishing must cease at 7:00 p.m. to allow for restocking. Camping is available at the area and the Department of Game and Inland Fisheries owns and manages the surrounding land.

Crooked Creek Fee Fishing Area

Crooked Creek is located in Carroll County, five miles east of Galax. The area consists of five miles of stream which is stocked daily. In addition, approximately two miles of stream are managed as a wild trout fishery. Crooked Creek is a wide, fairly low gradient stream with a gravel bottom. Surrounding land is mixed fields and woodlots not characteristic of the more common mountain stream drainages. As at the Clinch Mountain Area, fishing must cease at 7:00 p.m. to allow for restocking. No facilities are available at Crooked Creek for camping but private facilities are available nearby.



Brown trout; photo by Soc Clay.

Douthat Lake Fee Fishing Area

Douthat Lake is a 60-acre state park impoundment located north of Clifton Forge. The lake provides fishing for bass, bluegill, pickerel and catfish in addition to trout which are stocked twice weekly. The lake and surrounding areas are administered by Virginia Division of Parks. Available recreation includes camping, hiking and swimming in addition to fishing. Cabins are also available for rent if application is made well in advance. The lake is located in a mountain setting with most of the surrounding land within the George Washington National Forest.

Trout Lakes

The warm summer climate of Virginia limits the potential for development of good trout populations in lakes. Numerous small ponds and lakes are stocked in the spring under

the put-n-take program. However, very few provide good year-round trout habitat for management of wild or put-n-grow trout fisheries. In order to provide adequate coldwater habitat in Virginia, a lake must either be located at high elevations where cool summer temperatures prevail or be deep enough to maintain a cold layer of water. Virginia has five small lakes at sufficient elevation for trout and two reservoirs deep enough to provide a two-story fishery. These two-story reservoirs stratify during summer months, providing an upper, warmwater layer where fish such as bass, bluegill, crappie and catfish exist and a deep, coldwater layer suitable for trout.

Laurel Bed Lake (Russell County)

Laurel Bed Lake is a 330-acre, mountaintop impoundment located approximately 10 miles northwest of Saltville. The lake is included in the Clinch Mountain Fee Fishing Area

and, in addition to providing a unique fishery, is used to augment flow to Big Tumbling Creek during summer months. The lake is open to fishing from the opening day of trout season until November 1, with a creel limit of five fish per day. As with the remaining sections of the fee fishing area, a daily permit is required in addition to a state fishing license. The fishery has been based almost entirely on brook trout in past years. Fingerling or subcatchable brook trout are stocked in November or December. The trout are usually in the eight to 10-inch size range by opening day with occasional holdover fish of up to two pounds. These fish are fat, with pink flesh, a coloration usually associated with fish from northern states and Canada. Fishing is usually excellent through May with limits of trout being common. Favored fishing methods include nightcrawlers, meal worms, flies and spinners. Minnows are not allowed at the lake in order to prevent introduction of other fish species. Fishing usually becomes sporadic as the lake temperature increases with fish hitting well for a few days, then slacking off for several days. Favorite summer fishing spots are located around coves where spring branches feed in. Late summer and early fall fishing is dependent on the number of fish that survive through the summer, and changes significantly from year to year. Limited camping is permitted on the management area and a concession is in operation.

Lexington City Reservoir

The Lexington City Reservoir is a Lexington Water Supply Reservoir of 22 acres. It is a put-n-grow lake that is stocked annually with brook trout. They have been stocked for the past four or five years and grow naturally to catchable size. The brookies have done well in the reservoir and many measure nine to 13 inches in length.

It is a half mile hike to the reservoir and primitive camping is permitted. General fishing regulations are in effect and no trout stamp is required. A daily permit is required and is available from the Lexington Recrea-

tion Department (703) 463-9525. Take Route 251 from Lexington to Route 612. The access road is off Route 612 at Oakdale.

Mill Creek and Coles Run Reservoirs

Mill Creek (17 acres) and Coles Run (13 acres) are located in the Pedlar Ranger District of the George Washington National Forest. They are both old Augusta County Water Supply Reservoirs that were first opened to fishing in 1990.

The lakes are managed as put-n-grow lakes and are stocked annually with small brook trout. Samples collected in fall of 1990 show good populations of 10 to 12-inch brook trout.

There are no facilities and access by foot is about a half mile to Coles Run and 1½ miles to Mill Creek. For more information, call the Pedlar Ranger District in Buena Vista at (703) 261-6105. Access is west of Route 664 at Sherando off of Forest Road 42.

Skidmore Lake (Switzer Dam)

Skidmore Lake is a 104-acre impoundment located off of Route 33 west of Harrisonburg. The dam was built by the Soil Conservation Service for flood control and water supply, and is now managed by the City of Harrisonburg. An access road is available off of Route 33. Boats, without motors, are permitted but must be carried to the water as no ramp is provided. Fingerling brook trout have been stocked since 1976 and fishing has been permitted since 1979. Fisherman success has been good with most fish in the 8 to 14-inch range. In addition, occasional large brook trout of 2 to 3 pounds have been taken. No camping is permitted at the lake but primitive camping is available in the National Forest nearby.

Lake Moomaw

This flood control reservoir was completed in 1981 with the closing of the Gathright Dam on the Jackson River. It resulted in the formation of a 12-mile long, 2,530 acre reservoir with more than 43 miles of shoreline.

Much of the shoreline is adjacent to the 13,428-acre Gathright Wild-



life Management Area which is owned and managed by the Department of Game and Inland Fisheries. The average depth of the lake is 80 feet and flow augmentation results in a normal five to 15-foot drawdown by late summer.

Trout management at the reservoir consists of stocking subcatchable brown trout and McConaughy strain of rainbow trout.

Brown trout fishing had been spectacular, but then suddenly dropped off due to low survival rates of the 1987-88 fall stockings. The 1989 stocking has done well, however, and brown trout of 2 to 3 pounds should be numerous in 1991. Moomaw tallied 126 citation browns in 1989 including the top three and seven out of the top ten. The biggest was a 10 lb. 5 oz. fish. The new 10-inch size limit will protect newly stocked fish.

McConaughy strain rainbow trout are doing very well also. Most trout

are caught by trolling with shad imitation crankbaits, some are caught still fishing with live shad 25 feet down and others by jump fishing. Some are caught incidental to bass fishing. Anglers took 70 citation rainbows out of Moomaw last year.

The area around Moomaw provides nearly year-round opportunities for boating water sports, fishing, camping, picnicking, hiking, birding, sight-seeing, photography and hunting.

Boats are restricted to a maximum length of 25 feet. No house boats are allowed and excessive noise is prohibited. Trailer launched boats must be launched at ramps at Fortney Branch or Bolar Flat. Canoes and cartops can be launched at Coles Mountain Fishing Access, McClintock Bridge, McClintock Point and Midway.

The lake is open 24 hours a day, year-round. There is a 12-inch size limit on bass and 10 inches on trout



photo by Soc Clay

(5 per day). Neither trout nor Forest Stamp is required.

The Bolar Mountain Recreation Area provides camping, swimming beaches, restrooms and picnic grounds. Bolar Flat has a picnic area, a four-lane boat dock and a courtesy dock and restrooms. There are primitive camping areas at Greenwood and McClintock Point. The Morris Hill Campground and picnic area; the four-lane Fortney Branch ramp and courtesy dock and the Coles Mountain Area are located on the south end of the lake in Alleghany County. A daily fee is charged for swimming, picnicking and camping.

For facilities information, contact the James River Ranger District in Covington (703) 962-2214; the Warm Springs Ranger District in Hot Springs (703) 839-2521; or the U.S. Army Corps of Engineers in Covington (703) 962-1138.

Philpott Reservoir

Philpott Lake is a 2,880-acre reservoir located west of Martinsville. Warmwater fishing is the major attraction, but trout are also stocked annually. Stockings generally consist of 8 to 9-inch McConaughy rainbow trout released in the fall of the year. Fishing success has been highly variable, probably due to the varying size of the summer coldwater habitat available. Trout can be caught throughout the lake during spring, fall and winter, but during summer months most successful fishermen fish deep at night. Philpott generally produces some of the larger rainbow trout taken each year with catches up to 7 or 8 pounds.

Special Regulation Trout Streams

Special regulation areas provide anglers with the opportunity to catch more and larger trout throughout the fishing season. Restrictions have been applied to certain wild trout waters as well as several types of stocked trout streams, and they include some of the state's best trout water. Check your fish law digest for the specific regulations applying to each area.

Wild Trout Streams

In the following streams, regulations require use of single hook artificial lures and all trout less than 9 inches in length be returned to the water unharmed. The exceptions are the Rapidan River and its tributaries (which require the use of single barbless hook artificial lures), Stewart's Creek, and North Fork Moorman's River, which require the release of all fish caught.

Buffalo Creek (Amherst County)

Special regulations apply to that portion of North Fork of Buffalo Creek and its tributaries within the George Washington National Forest. Access is available by forest trail off of Forest Road 51 or from the end of State Route 635. Buffalo Creek is a moderate to high gradient stream dominated by large boulders and deep pools. The stream contains a

good native brook trout population with numerous fish 8 to 10 inches in length.

Conway River/Devils Ditch (Greene County)

Special regulations apply to that portion of Conway River and its major tributary, Devils Ditch, within the Rapidan Wildlife Management Area. The stream contains brook trout in the upper reaches with wild brown trout scattered through the lower portions. Adult brook trout range from 7-11 inches in length, brown trout occasionally exceed 20 inches. The stream lies north of Starnardsville and can be reached by Route 615 from Graves Mill. The area adjoins the Shenandoah National Park.

Little Stony Creek (Giles County)

Special regulations apply to that portion of Little Stony Creek in the Jefferson National Forest. Most of the special section is below the Cascades waterfall. The upper reaches of Little Stony Creek contain native brook trout, but rainbow trout comprise most of the trout population below the Cascades. Adult rainbows average 7-12 inches in length. The area is heavily used by hikers and picnickers. The stream is located near Pembroke and can be reached by Route 623.

Little Stony Creek (Shenandoah County)

Little Stony Creek is a small mountain brook trout stream. The special regulations apply to that portion of stream above Woodstock Reservoir. Adult brook trout presently average from 7-10 inches in length. The stream is located west of Woodstock and Forest Service Road 92 crosses the lower portion of the special regulation section. Much of the upper reaches can only be reached by foot trail.

North Creek (Botetourt County)

The upper section of the stream (above the first bridge upstream of the North Creek campground) is designated for special regulations while the lower portion remains put-n-take trout water. Rainbow trout predominate, although brook trout are present in the headwater tributary-

ies. Adult trout will range from 7-12 inches. The stream is located east of Buchanan, a short distance from I-81. The Jefferson National Forest maintains a campground adjacent to the stream and vehicular access is available along most of its length.

North Fork Moorman River (Albemarle County)

The Shenandoah National Park recently designated that portion of the Moorman River within the Park as its second fish-for-fun stream. Regulations are the same as Rapidan River where only single barbless hooks are permitted and no fish may be creeled. The stream contains an excellent population of brook trout with numerous adults of 8 to 12 inches. In addition, a small population of wild brown trout can be found in the lower half of the stream. Moorman River can be reached by State Route 614 past Sugar Hollow Reservoir. A good foot trail parallels the stream from the Park boundary.

Ramsey's Draft (Augusta County)

Ramsey's Draft and its tributaries within the George Washington National Forest, becomes a special regulation trout stream this year. Over 10 miles of fishable water, primarily within the recently created Ramsey's Draft Wilderness Area provides anglers with an opportunity to catch native brook trout up to 10 inches in length in a remote setting. Late summer stream flows are often quite low, so plan to fish Ramsey's Draft during the springtime. To reach Ramsey's Draft, drive 15 miles west of Churchville on State Route 250 and look for the Mountain Home Picnic Area on the right. A foot trail parallels the stream from the picnic area.

Rapidan River (Madison County)

The Rapidan is our best known special regulation trout stream. Unlike the other streams in this category, the Rapidan is further restricted to barbless hook and fish-for-fun regulations. The special regulation area includes that portion of the stream within the Shenandoah National Park and the Rapidan Wildlife Management Area. The stream may be reached by Route 662 from Graves

Mill or Route 649 from Criglersville. A dirt road parallels most of the stream but the upper portion is gated. Native brook trout are the dominate species and adult trout range from 7-14 inches in length. Due to the special no creeling regulation, the Rapidan contains many 10-11 inch trout.

St. Mary's River (Augusta County)

The special regulation section includes all portions of the St. Mary's River above the gate at the National Forest boundary. It is a fairly high gradient with a number of waterfalls. Although water levels can get quite low along lower reaches, flows are much improved upstream and large, deep pools provide ample trout cover. Adult brook trout and rainbow trout average 8-12 inches in length. The stream lies east of Raphine off of Route 608 a short distance from I-81. Most of the area is accessible by foot trail only and backpacking is popular.

Stewart's Creek (Carroll County)

Stewart's Creek is one of three catch-and-release trout fisheries in the state. It is a high-gradient native brook trout stream with numerous plunge pools, rock ledges, and a dense rhododendron canopy for cover. Around 4.5 miles of Stewart's Creek and its two major tributaries, North Fork and South Fork Stewart's Creek, were opened to the public in 1989 for year-round fishing. Only single hook, artificial lures can be used.

Stewart's Creek Wildlife Management Area is southeast of Galax on the North Carolina side of the Blue Ridge Parkway. Take exit 1 off I-77. Follow the trailblazer signs to the area.

Whitetop Laurel/Green Cove Creek (Washington County)

The special regulation area includes the lower mile of Green Cove Creek plus Whitetop Laurel Creek from the mouth of Green Cove to the first bridge above the village of Taylors Valley. Whitetop Laurel is one of Virginia's largest and most beautiful wild trout streams. Wild rainbow trout dominate, with most adults in

the 7-14-inch class. A few wild brown trout provide occasional trophy fish. The special regulation area is located east of Damascus near the Tennessee line and within the Mount Rogers Recreation Area.

Shenandoah National Park

The Park provides an entire region of special regulation trout streams extending from Front Royal to Waynesboro. Regulations require the use of single hook, artificial lures only, and restrict daily creel limits to five fish all of which are eight inches or more. The season is open from the third Saturday in March through October 15th. Most streams within the Park contain good populations of native brook trout, but not all are open to fishing. Some isolated brown trout are also found in the lower reaches of the large, east slope streams.

Stocked Trout Streams

In the following two streams, special regulations require the use of single hook, artificial lures and restrict creel to fish over 12 inches in length. Trout from 8-10 inches are stocked periodically and allowed to grow for several months to a year before being creeled. This approach can be used in streams that maintain good flow, cool summer waters and are productive enough for good growth of trout.

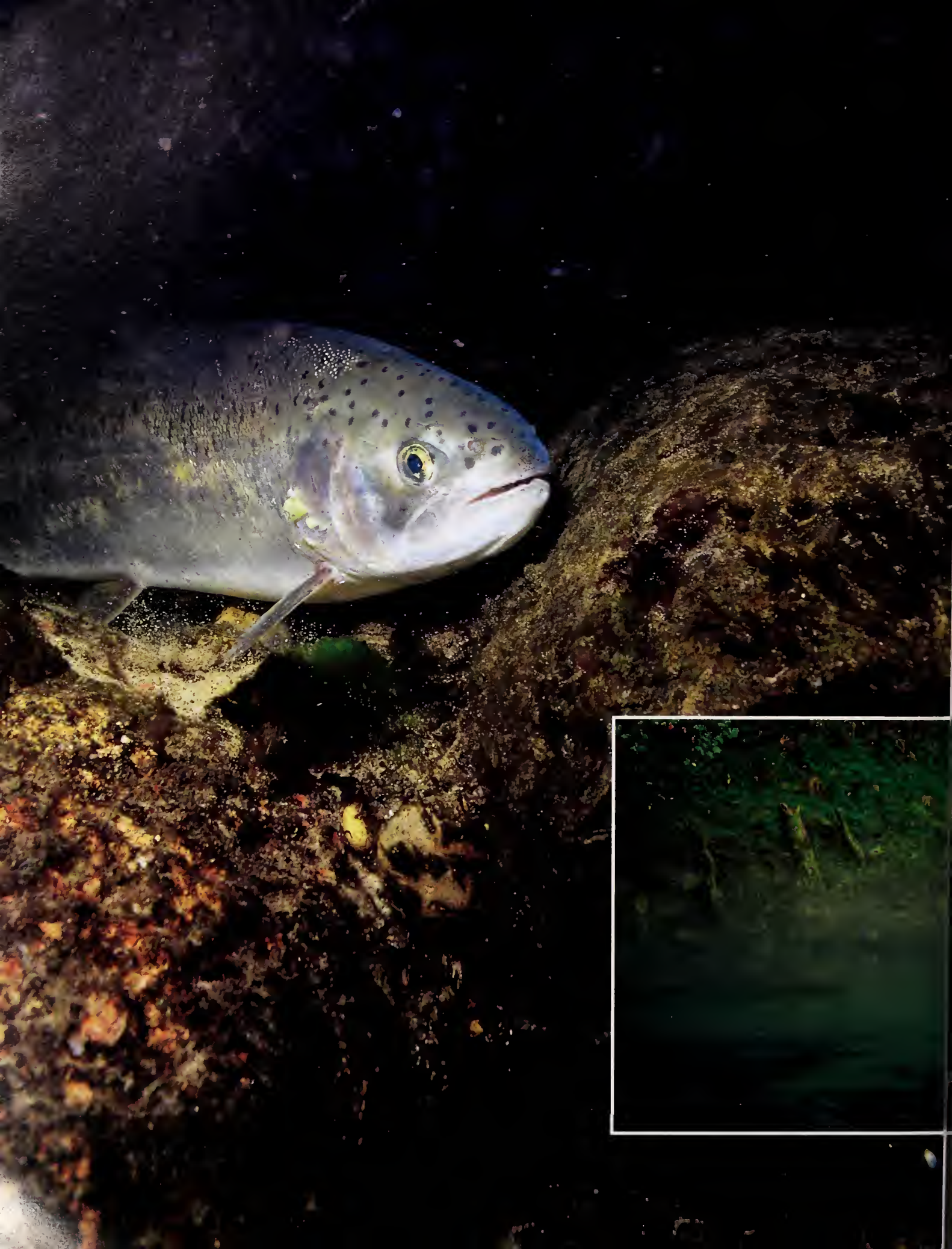
Smith Creek (Alleghany County)

The special regulation section extends from the Forest Service boundary above the old C & O dam upstream 2.5 miles to the Clifton Forge Dam. Within this section, sub-catchable brown trout are stocked once annually. The stream contains good numbers of 8 to 12-inch brown trout with occasional fish to 20 inches. The stream maintains good flow throughout the year and provides wide, flat pools and good fly fishing opportunities. The best way to access this stream is by Route 606 from Clifton Forge to the access road for the Clifton Forge Water Plant. Fishermen must park at the entrance and walk a half mile to the stream.

Snake Creek (Carroll County)

Special regulations apply to all of Big Snake Creek below Hull Ford





and all of Little Snake Creek below the junction of Routes 922 and 674. The stream is located just north of Fancy Gap. Snake Creek is a moderate gradient, softwater, gravel bottomed stream with an average width of about 18 feet. Holdover of stocked fish is good along with a fair population of native brook trout.

Trophy Trout Streams

Management of a few selected streams as trophy trout water is relatively new to Virginia. Regulations restrict fishing to the use of single hook artificial lures and the creel to 2 fish per day over 16 inches. Mossy Creek and Smith Creek, furthermore, are restricted to flyfishing only. The management approach is to stock fingerling trout (5-6") in high quality streams where they will grow exceptionally fast.

Buffalo Creek (Rockbridge County)

The special regulation area includes that section of stream from the confluence of Colliers Creek upstream 2.9 miles to the confluence of North and South Forks of Buffalo Creek. The stream flows through private

land and requires a written landowner permit to fish. Brown and rainbow trout are stocked annually as sub-catchables and good numbers of 10 to 16-inch fish are available. Trophy fish of 5 to 8 pounds have been caught in the stream. Buffalo Creek can be reached by taking Route 251 from Lexington.

Smith Creek (Rockingham County)

The special section includes approximately 1.5 miles of stream opened in 1989 near Lacy Spring. Smith Creek flows through private farmland and requires a written landowner permit to fish. Brown trout fingerlings are stocked annually in the fall. Good numbers of 10-16 inch trout are available and fish over 4 pounds have been reported. In the flyfishing only stream, only two trout over 16 inches can be creeled daily, and year-round fishing is allowed.

Back Creek (Bath County)

The rugged mountains that form the backdrop to the Back Creek special regulation area featuring a trophy brown trout fishery is one of the area's most appealing features.

Brown trout fingerlings are stocked annually and the year-round fishery was opened to the public in 1989. Trout growth is outstanding, and angling is restricted to artificial lures with creeling limited to two 16-inch trout daily. A campground, picnic pavilion, outdoor games, and two warmwater lakes for fishing and swimming also can be enjoyed. Take Route 42 west of Warm Springs to Mountain Grove, right on Route 600 for 6 miles to the area.

Mossy Creek (Augusta County)

The special section includes about 4 miles of stream extending upstream from the Augusta/Rockingham County line. The stream is located just off of Route 42 south of Bridge-water. Fishing in Mossy Creek is restricted to flyfishing only and a written landowner permit must be obtained. Mossy Creek is a classic, meadow limestone stream averaging about 15 feet in width and flowing

through open pastures. Brown and rainbow trout are both present and numerous fish in the 3 to 7-pound class are available to fishermen.

Smith River (Henry County)

The special area includes the posted section extending 3 miles downstream from Towne Creek near the town of Bassett. Smith River is Virginia's most noted trophy trout stream. The current state record, 18 pound 11 ounce brown trout was taken in 1979 and numerous trout exceeding 10 pounds have been caught. Smith River is a large, flat, tailwater stream receiving coldwater discharges from Philpott Dam.

Delayed Harvest Trout Streams

In 1989, the Department initiated a new management program with establishment of Virginia's first "delayed harvest" trout fishery. This program incorporates aspects of both fish-for-fun and put-n-take trout fishing. Catchable sized trout are stocked in the fall, winter and spring. From October 1st through the following May 15th, only single hook artificial lures may be used and all fish must be returned unharmed. From May 16th through September 30th, general trout regulations are in effect and trout may be creeled. This management approach appears to have considerable potential to provide high quality fishing to a large number of fishermen.

South River (Augusta County)

The delayed harvest section extends from the CSX railroad bridge below Broad Street (Route 250) in Waynesboro upstream 2.5 miles through Ridgeview Park. This stream section runs through the city of Waynesboro and is in an urban setting. South River is a relatively large, wide stream with shallow runs and riffles. The stream provides outstanding flyfishing opportunities because of its size and its abundance of aquatic insects. The stream is open to fishing year-round and provides excellent winter fishing.



photo by Lloyd B. Hill

Caution:

We have made an effort to include all quality trout fishing waters on these area maps. Inclusion of a stream, however, does not indicate that all or part of the stream is open to public fishing. Some of the native trout streams listed will require landowner permission and additional permits as will a few of the special regulation streams. Please call your district fisheries office if you have a question concerning private vs. public fishing on a stream.

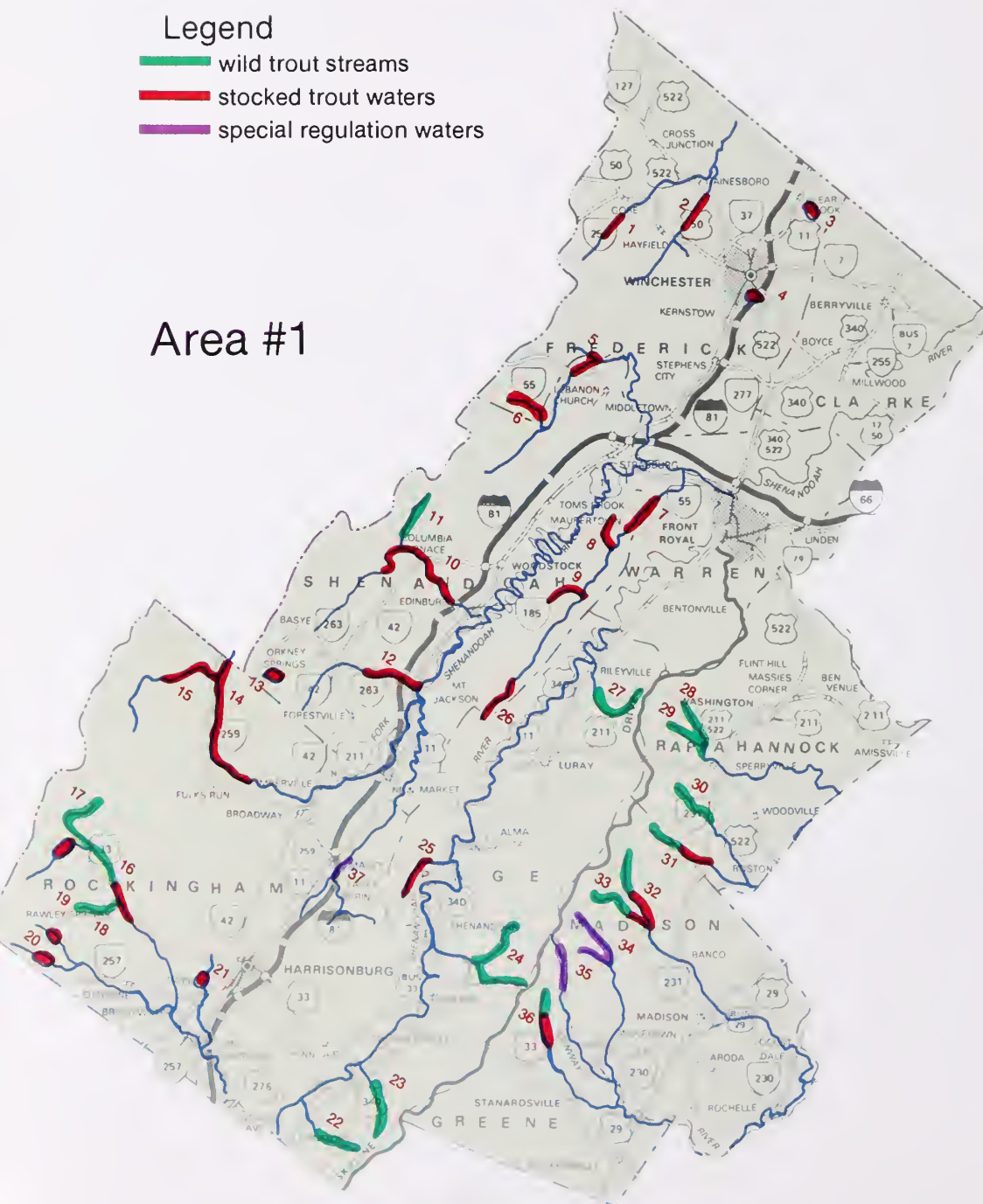
In addition, we have given the **general** location of each stream, but it is essential to obtain a topographical or county map to pinpoint specific locations before you start your fishing trip.



Legend

- wild trout streams
- stocked trout waters
- special regulation waters

Area #1



Frederick County

- (1) Back Creek
- (2) Hogue Creek
- (3) Clearbrook Lake
- (4) Winchester Lakes
- (5) Cedar Creek
- (6) Paddy Run

Shenandoah County

- (7) Passage Creek
- (8) Little Passage Creek
- (9) Peters Mill Creek
- (10) Big Stony Creek
- (11) Little Stony Creek
- (12) Mill Creek
- (13) Tomahawk Pond

Rockingham County

- (14) N. Fk. Shenandoah River
- (15) German River
- (16) Dry River
- (17) Switzer Lake
- (18) Blacks Run
- (19) Hone Quarry Lake
- (20) Briery Branch lake
- (21) Silver Lake
- (22) Madison Run (SNP)
- (23) Big Run (SNP)
- (37) Smith Creek

Page County

- (24) Naked Creek (SNP)
- (25) Cub Run
- (26) Upper Passage Creek
- (27) Jeremys Run (SNP)

Rappahannock County

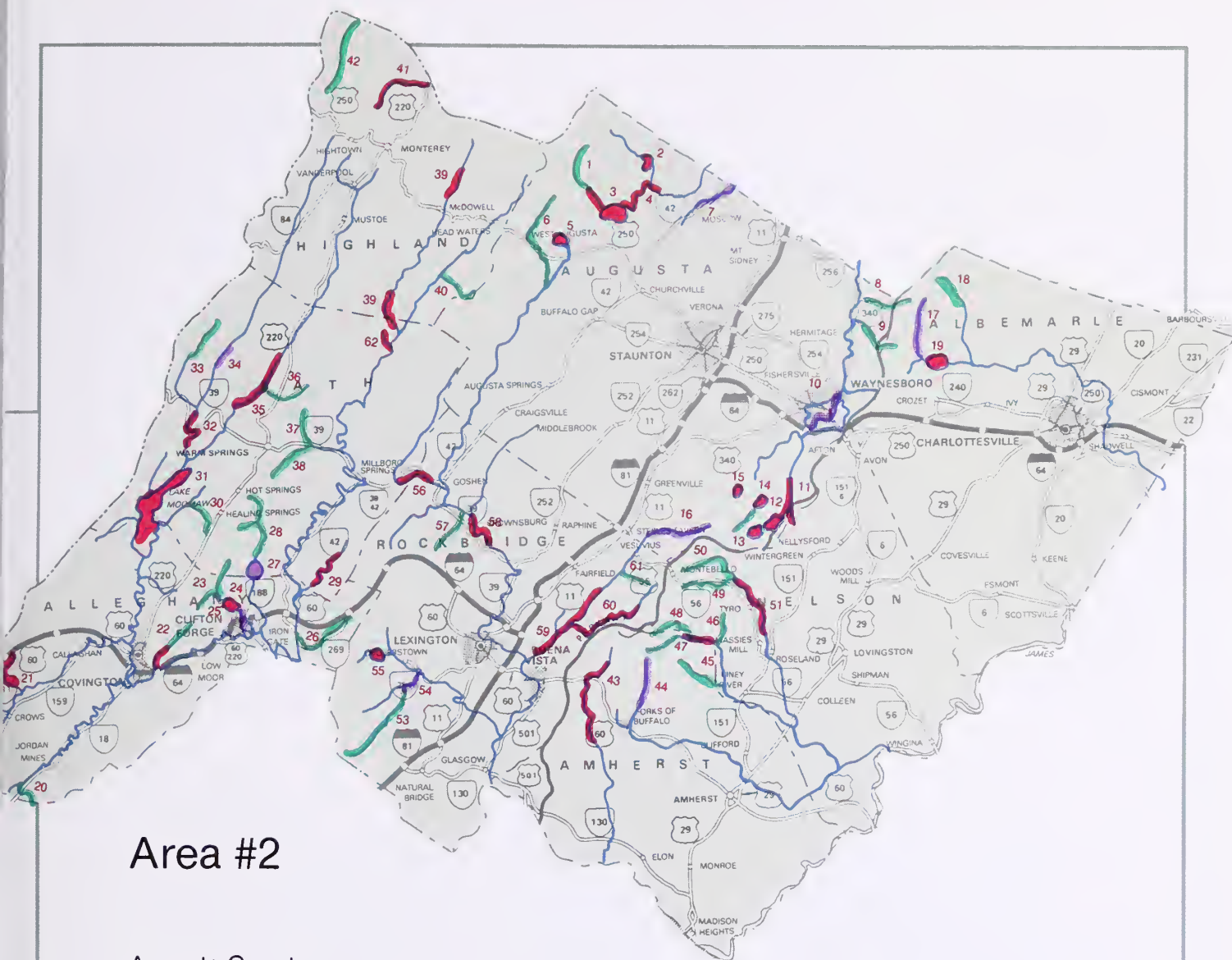
- (28) Piney River (SNP)
- (29) N. Fk. Thornton River (SNP)
- (30) Hazel River (SNP)

Madison County

- (31) Hughes River (SNP)
- (32) Robinson River (SNP)
- (33) Rose River (SNP)
- (34) Rapidan River (SNP)

Greene County

- (35) Conway River
- (36) South River



Area #2

Augusta County

- (1) North River
- (2) Hearthstone Lake
- (3) Elkhorn Lake
- (4) North River
- (5) Braley Pond
- (6) Ramseys Draft
- (7) Mossy Creek
- (8) Meadow Run (SNP)
- (9) Paine Run (SNP)
- (10) South River
- (11) Back Creek
- (12) Lower Sherando River
- (13) Upper Sherando River
- (14) Mill Creek Reservoir
- (15) Coles Run Reservoir
- (16) St. Marys River

Albemarle County

- (17) N. Fk. Moormans River (SNP)
- (18) Doyles River (SNP)
- (19) Sugar Hollow Reservoir

Allegheny County

- (20) Shawvers Run
- (21) Jerrys Run
- (22) Pounding Mill Creek
- (23) Smith Creek

- (24) Clifton Forge Reservoir
- (25) Smith Creek
- (26) Simpson Creek

Bath County

- (27) Douthat Lake
- (28) Wilson Creek
- (29) Pads Creek
- (30) Cascades Creek
- (31) Lake Moomaw
- (32) Back Creek
- (33) Little Back Creek
- (34) Back Creek
- (35) Jackson River
- (36) Muddy Run
- (37) Jordan Run
- (38) Mares Runs
- (62) Spring Run

Highland County

- (39) Bullpasture River
- (40) Benson Run
- (41) S. Fk. Potomac River
- (42) Laurel Fork

Amherst County

- (43) Pedlar River
- (44) N. Fk. Buffalo River
- (45) Little Piney River
- (47) S. Fk. Piney River
- (48) N. Fk. Piney River

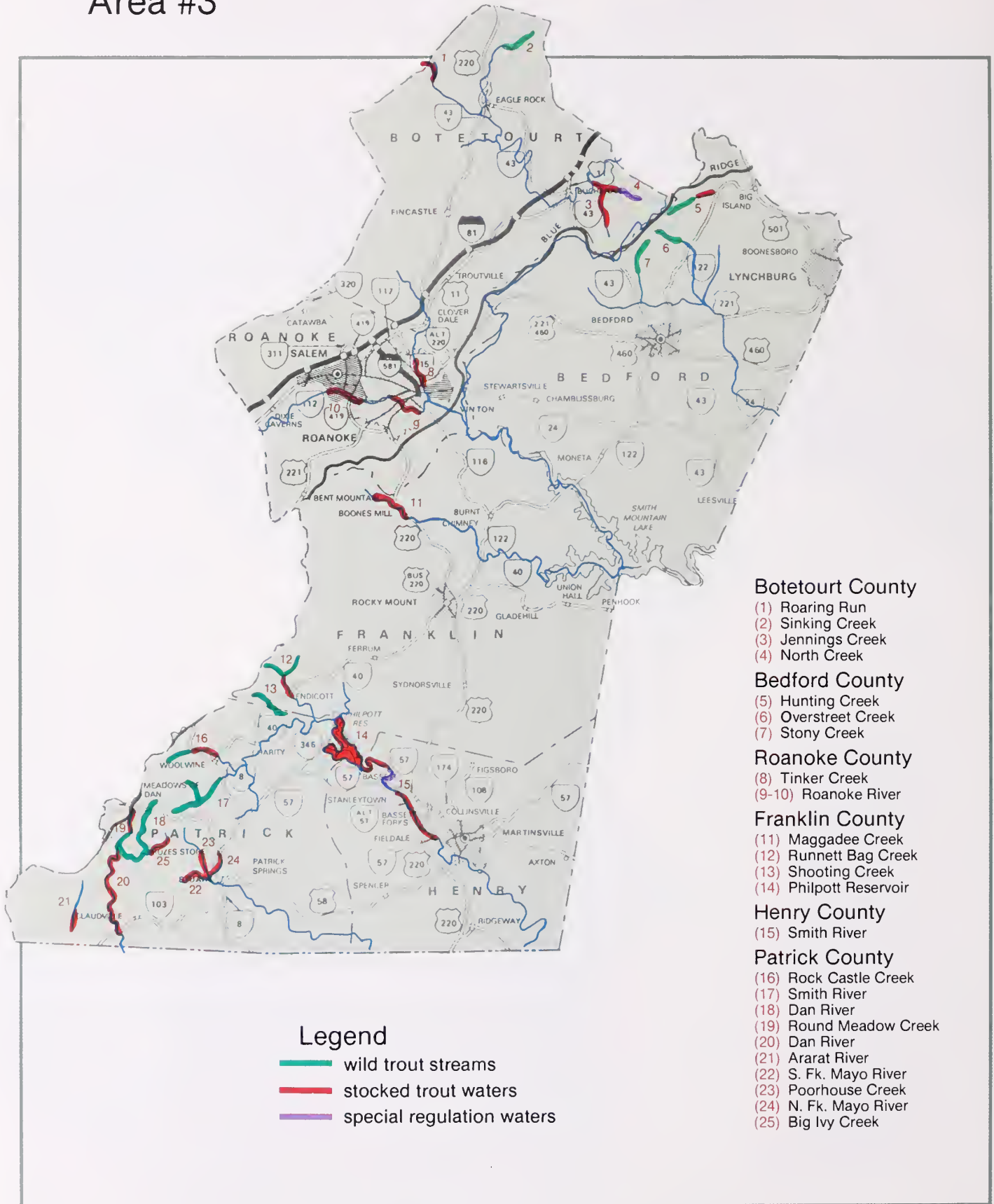
Nelson County

- (46) Shoe Creek
- (49) S. Fk. Tye River
- (50) N. Fk. Tye River
- (51) Tye River

Rockbridge County

- (53) S. Fk. Buffalo Creek
- (54) Buffalo Creek
- (55) Lexington Reservoir
- (56) Mill Creek
- (57) Guys Run
- (58) Maury River
- (59) South River
- (60) Irish Creek
- (61) Big Marys Creek

Area #3



Area #4

Craig County

- (1) Potts Creek
- (2) Barbours Creek
- (3) Meadow Creek

Giles County

- (4) Big Stoney Creek
- (5) Little Stoney Creek
- (6) Johns Creek
- (7) Mill Creek
- (8) Dismal Creek

Montgomery County

- (9) Craig Creek
- (10) Poverty Creek
- (11) Toms Creek
- (12) S. Fk. Roanoke River

Floyd County

- (13) Goose Creek
- (14) Little River
- (15) W. Fk. Little River
- (16) Howells Creek
- (17) Mira Fork
- (18) Indian Creek
- (19) Burkes Fork
- (20) Laurel Fork

Carroll County

- (21) Big Reed Island Creek
- (22) Snake Creek
- (23) Elk Spur Branch
- (24) Stewarts Creek
- (25) Crooked Creek
- (26) Little Reed Island Creek

Pulaski County

- (27) W. Fk. Peak Creek

Bland County

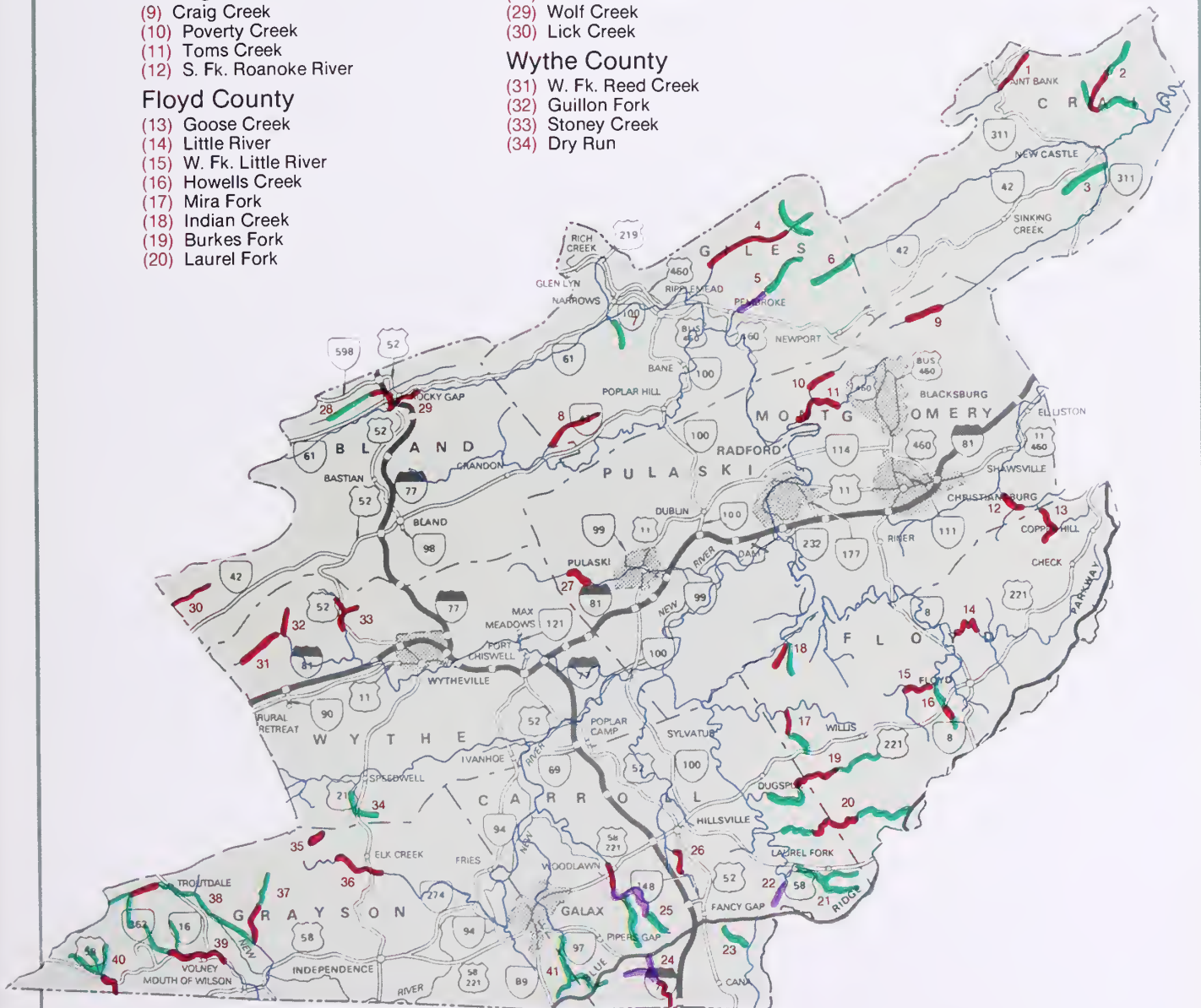
- (28) Laurel Fork Creek
- (29) Wolf Creek
- (30) Lick Creek

Wythe County

- (31) W. Fk. Reed Creek
- (32) Guillon Fork
- (33) Stoney Creek
- (34) Dry Run

Grayson County

- (35) Hales Lake
- (36) Elk Creek
- (37) Middle Fox Creek
- (38) Fox Creek
- (39) Big Wilson Creek
- (40) Helton Creek
- (41) E. Fk. Chestnut Creek



Legend

- Graphics by Emily Pels

(1) Russell Fork
(2) Pound River
(4) Frying Pan C

(3) Dismal River

(5) Clear Creek
(6) High Knob Lake

(7) N. Fk. Powell River
(8) Martins Creek

(9) Big Stoney Creek
(10) Stock Creek
(11) Little Stoney Creek
(12) Bark Camp Lake

(13) Big Cedar Creek
(16) Laurel Bed Lake

- (14) Big Brumley Creek
- (15) Big Tumbling Creek
- (29) Whitetop Laurel
- (30) Straight Branch
- (31) Beartree Lake
- (32) Tennessee Laurel
- (33) Green Cove Creek

(17) Little Tumbling Creek
(18) Maiden Spring Creek

- (23) Lick Creek
- (24) Middle Fk. Holston River
- (25) S. Fk. Holston River
- (26) Hurricane Creek
- (27) Comer Creek
- (28) Little Laurel Creek

Trout Stocking Plan

As the 1991 trout season approaches, preparations are being made to begin stocking streams and lakes. The season will officially open at 9:00 a.m. on Saturday, March 16, 1991 and will close on February 1, 1992.

A few changes will be made in streams stocked during 1991. Liberty Lake in Bedford County and Clarks Creek in Patrick County have been added to the stocking list. Francis Mill Creek in Wythe County has been dropped due to insufficient habitat. In its place, the Ravens Cliff Area of Cripple Creek, also in Wythe County, has been added. Cove Branch in Craig County has been dropped due to insufficient stream mileage available for stocking.

After opening day, most streams will receive additional introductions of trout through May 31. The number of stockings streams will receive will vary from 1-5. Poorer quality streams will receive the fewest introductions; while better streams will be stocked more often. Most in-season introductions will occur at two to two and one-half week intervals.

Streams to be stocked are listed by county in the following table along with the last stocking date introductions will occur. Streams to be stocked during the fall are also noted.

	Spring Stocking Completed By:	Fall Stocked Streams
ALBEMARLE COUNTY		
Moormans River (N.& S. Forks)	5/18	
Sugar Hollow Reservoir	6/1	X
ALLEGHANY COUNTY		
Smith Creek*	4/15	
Jerry's Run*	4/15	
Pounding Mill Creek	4/15	
Clifton Forge Reservoir*	5/31	X
AMHERST COUNTY		
Pedlar River (Upper)*	6/1	
Pedlar River (Lower)*	6/1	X
Piney River (S.Fork & Proper)*	6/1	
Davis Mill Creek*	5/18	
Little Irish Creek*	4/20	
AUGUSTA COUNTY		
North River (Gorge)	4/30	
North River (Upper)*	4/15	
Falls Hollow*	4/15	
Braley Pond*	5/15	
Back Creek*	4/30	
Upper Sherando Lake*	5/15	X
Lower Sherando Lake*	5/15	X
Hearthstone Lake*	5/15	X
Elkhorn Lake*	5/15	X
Mill Creek*	3/31	

	Spring Stocking Completed By:	Fall Stocked Streams
BATH COUNTY		
Back Creek*	4/30	X
Pads Creek*	4/15	
Jackson River (Hidden Valley)*	5/31	X
Jackson River (Route 623)	5/31	X
Bullpasture River	5/31	X
Spring Run	5/31	X
Douthat Lake	N/A	X
BEDFORD COUNTY		
Hunting Creek*	6/1	
Liberty Lake	5/1	
BLAND COUNTY		
Lick Creek*	6/1	
Wolf Creek	6/1	X
Laurel Fork Creek	4/20	
BOTETOURT COUNTY		
Jennings Creek*	5/20	X
North Creek*	5/20	
Middle Creek*	4/20	
McFalls Creek*	4/20	
Roaring Run*	5/20	X
BUCHANAN COUNTY		
Dismal River	5/18	X
Hurricane Fork	4/6	
CARROLL COUNTY		
Big Pauls Creek**	3/30	
Crooked Creek	5/18	X
Laurel Fork Creek	5/18	X
Little Reed Island Creek	6/1	X
Lovills Creek**	3/30	
Snake Creek (Fish-for-fun)**	4/6	
Stewarts Creek	5/4	
CRAIG		
Barbours Creek*	5/4	
North Fk. Barbours Creek* ¹	N/A	
Potts Creek*	6/1	X
DICKENSON COUNTY		
Frying Pan Creek	5/18	
Russell Fk.-Haysi	5/18	
Russell Fk.-Bartlick	5/31	X
Pound River	5/31	X
FLOYD COUNTY		
Burkes Fork	6/1	X
Goose Creek	4/6	
Howell Creek	5/4	
Laurel Fork	4/20	
Little Indian Creek	5/4	X
Little River	6/1	X
Mira Fork Creek	4/6	
Little River (W. Fork)	5/4	
Rush Fork ¹		
FRANKLIN COUNTY		
Maggadee Creek	5/4	
Greene Creek	5/4	X
Runnett Bag Creek	4/27	X
FREDERICK COUNTY		
Back Creek**	4/20	
Hogue Creek	4/20	
Cedar Creek	5/31	X
Clearbrook Lake	5/10	X
Winchester Lake	5/10	X
Paddy Run	5/1	
GILES COUNTY		
Big Stoney Creek*	6/1	X
Dismal Creek*	5/18	

	Spring Stocking Completed By:	Fall Stocked Streams		Spring Stocking Completed By:	Fall Stocked Streams
GRAYSON COUNTY			ROCKINGHAM COUNTY		
Big Wilson Creek	5/18		Shenandoah River (N. Fork)	5/20	X
Middle Fox Creek	5/31		German River	5/1	
Big Fox Creek*	5/18		Dry River	5/10	
Elk Creek	5/31	X	Silver Lake	4/20	X
Helton Creek*	5/31		Shoemaker River*	4/20	
Hales Lake*	5/31	X	Hone Quarry Lake*	5/20	X
GREENE COUNTY			Hone Quarry Run*	5/10	
Lynch River	4/6		Briery Lake*	5/10	X
South River	5/18	X	Briery Branch*	4/20	
HENRY COUNTY			RUSSELL COUNTY		
Smith River (Dam)	6/1	X	Big Cedar Creek	5/31	X
Smith River (Lower)	6/1	X	SCOTT COUNTY		
HIGHLAND COUNTY			Little Stony Creek*	5/18	
Bullpasture River	5/31		Stock Creek	5/18	
Potomac River	5/15		Big Stony Creek	5/18	
Bullpasture River (McDowell)	5/15		Straight Fork-Lower	5/18	
LEE COUNTY			Bark Camp Lake*	5/31	X
Martin's Creek	5/31	X	SHENANDOAH COUNTY		
Powell River (N. Fork)	5/31		Big Stoney Creek	5/30	X
MADISON COUNTY			Mill Creek	5/20	
Hughes River	6/1	X	Tomahawk Pond*	5/10	X
Robinson River	5/19		Passage Creek*	5/20	X
Rose River	5/19		Peters Mill Creek*	4/10	
Garth Run	4/13		SMYTH COUNTY		
MONTGOMERY COUNTY			S. Fork Holston River (Lower)	5/31	X
Craig's Creek*	4/20		S. Fork Holston River Gorge*	5/31	
Poverty Creek*	4/6		Staleys Creek	5/31	
Roanoke River (S. Fork)	6/1	X	Comer's Creek*	5/18	
Tom's Creek	4/20		Hurricane Creek*	4/27	
NELSON COUNTY			Cressy Creek*	4/6	
Tye River	6/1	X	Dickeys Creek*	4/6	
Tye River (N. Fork)	4/27		TAZEWELL COUNTY		
S. Rockfish River	3/30		Wolf Creek	5/31	X
PAGE COUNTY			Cove Creek	5/31	
Cub Run*	5/10		Laurel Creek*	5/18	
Upper Passage Creek*	4/20		Roaring Fork*	5/18	
PATRICK COUNTY			Little Tumbling Creek	5/31	
Ararat River	5/11		WASHINGTON COUNTY		
Clarks Creek	5/11		Whitetop Laurel-Upper*	5/31	X
Dan River (above Powerhouse)	6/1		Whitetop Laurel-Lower*	5/31	X
Dan River (below Powerhouse)	6/1	X	Tennessee Laurel	5/31	
S. Mayo River (N. Fork)	5/11		Green Cove Creek	5/18	
Poorhouse Creek	5/11		Big Brumley Creek	4/6	
Rock Castle Creek	6/1	X	Valley Creek	4/6	
Round Meadow Creek	6/15		Big Tumbling Creek	5/31	
S. Mayo River (S. Fork)	5/11		Straight Branch*	5/31	
PULASKI COUNTY			Bear Tree Impoundment*	5/31	X
Peak Creek	5/4		WISE COUNTY		
ROANOKE COUNTY			Clear Creek*	4/6	
Glade Creek	5/11	X	High Knob Creek*	5/18	
Roanoke River	5/11	X	WYTHE COUNTY		
Tinker Creek	5/11	X	Stoney Creek*	4/6	
ROCKBRIDGE COUNTY			Gullion Fork Creek*	4/6	
Mill Creek	5/15	X	Gullion Fork Ponds*	4/6	X
Irish Creek*	4/30		W. Fork Reed Creek*	5/4	
South River	4/30	X	Cripple Creek	5/4	
Maury River	5/15	X	*National Forest Streams		
			**Not stocked Preseason		
			!Stocked Preseason Only		

*National Forest Streams

**Not stocked Preseason

¹Stocked Preseason Only

Virginia Department
of Game and Inland
Fisheries Trout infor-
mation phone
numbers:
Area #1:
703/332-9210

Area #2:
703/332-9210,
703/857-7704
Area #3:
703/857-7704
Area #4 & 5:
703/783-6115

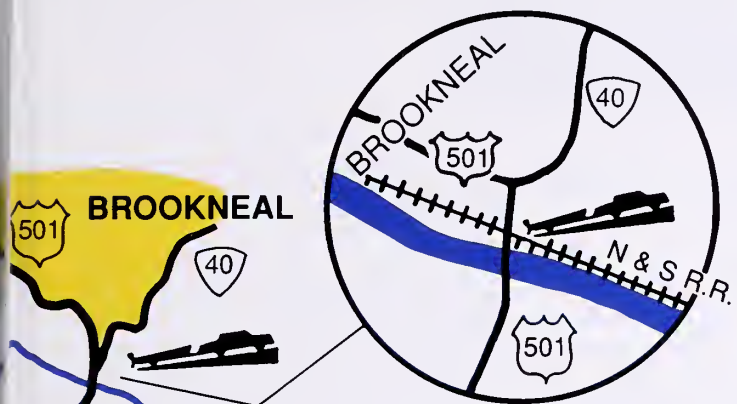


The Department of Game and Inland Fisheries shall afford to all persons an equal access to Department programs and facilities without regard to race, color, religion, national origin, disability, sex or age. If you believe that you have been discriminated against in any pro-

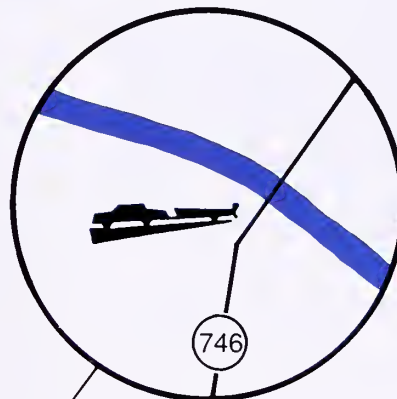
gram, activity or facility, please write to:

Virginia Department of Game and Inland Fisheries, Attn: Compliance Officer, 4010 West Broad Street, P.O. Box 11104, Richmond, Virginia 23230-1104.

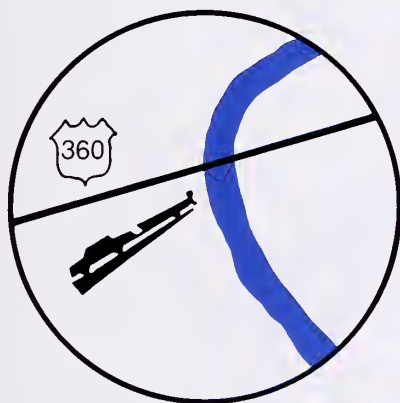
BROOKNEAL LANDING



WATKINS BRIDGE LANDING



360 LANDING



MT. LAUREL

CLOVER



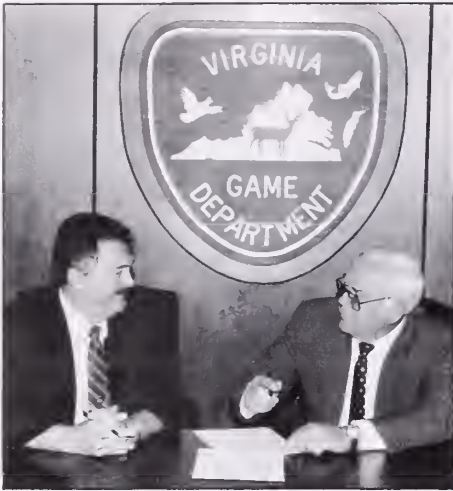
STAUNTON RIVER STATE PARK LANDING



KERR RESERVOIR (BUGGS ISLAND)



Historic Agreement Signed



Mr. Leon Turner (right), chairman of the Department of Game and Inland Fisheries signs an historic agreement with William C. Pruitt, (left) chairman of the Virginia Marine Resources Commission.

Mr. Leon Turner, Chairman of the Board of the Virginia Department of Game and Inland Fisheries (VDGIF) signed an historic cooperative agreement with William C. Pruitt, Commissioner of the Virginia Marine Resources Commission (VMRC) in October 1990. This agreement will coordinate the efforts of both agencies to better protect the inland streams in the western part of the state from illegal modification, including channelization, dredging, and the damming of waters. Although VMRC is the permitting agency for

any alteration to streams and stream bottoms in the state, they have limited personnel to enforce their regulations outside of the Tidewater area. VDGIF, on the other hand, has the enforcement personnel throughout the state to assist VMRC in their enforcement operations, particularly in the western part of the state. This agreement will provide VMRC with greater enforcement coverage, and assure VDGIF of the better protection of the Commonwealth's inland fisheries. □

Prints for Sale

The Virginia Deer Hunters Association is offering for sale Bill Bolen's signed and numbered 16¾" X 18¾" print "Monarch of the Fall Woods." A portion of the proceeds from these print sales will be set aside for the association's white-tailed deer scholarship fund, which was established in November, 1989. The fund is now approaching \$10,000, and will be used for graduate student projects on white-tailed deer research at Virginia universities.

Artist Bill Bolen has won numerous awards for his work, and the limited edition print of 1000 signed and numbered copies of "Monarch of the Fall Woods" is available for \$40.00 plus shipping and handling charges from the Virginia Deer Hunters Association, P.O. Box 34746, Richmond, VA 23234; phone: 804/743-1290. Remarques are available on request. □



Signed and numbered prints of Bill Bolen's "Monarch of the Fall Woods" are being offered for sale by the Virginia Deer Hunter's Association.

Bird Dog Seminar

April 5-7

Legendary bird dog trainer Delmar Smith will present a two-day, three-night seminar on bird dog training on April 5, 6, and 7 at Oakland Shooting Preserve in Orange County.

Open to the public, each participant will work with their own dog under Delmar's tutelage, learning the basics of field training a bird dog from the five-time winner of both the National Open and U.S. Open Brittany championships. For more information on fees and registration, contact the Lahore Bird Dog Club, c/o David Pomfret, Box 1265, Orange, VA 22960, 703/854-4540. □

Letters

I would like to congratulate Steve Ausband on his informative article regarding buckshot. I have been meaning to write a similar article for several years, but Mr. Ausband beat me to the punch and I must say he did an excellent job.

One area where I would have enjoyed more information would have been the effect of different types of barrels and chokes on the patterning of buckshot loads. My own limited results have been so varied as to indicate that it is difficult to draw any general conclusions, although for the most part it seems that when using screw-in chokes, the large buckshot patterns better with the improved cylinder than the full choke tubes. When using convention barrels, almost anything can happen! It does seem that each barrel and choke combination will have its own preference for a certain size of buckshot, and thus the patterning of any gun is essential.

When I began hunting deer with a shotgun several years ago, I received some advice from Earl Biggers who told me to "use the largest size shot that your gun will pattern well." This appears to be sound advice and is in harmony with the data presented in Mr. Ausband's article.

One final thought: the ammunition makers have worked hard to improve shot load performance. Perhaps improved barrel and choke design might result in further improvements in buckshot load performance. Congratulations again on a very informative article.

John F. Frantz, M.D.
Newport News

After your November '90 issue, I was very happy to see the flood of positive responses to your magazine in the January '91 issue. It's good to see that there are still plenty of people who will stick up for what they believe in.

In view of all the anti-hunting movement and media coverage, it is becoming increasingly important for sportsmen to hunt safely and ethically. I believe that the majority of non-hunters are not anti-hunters. They are neutral on the issue, and we must make sure that they don't become anti-hunters. We need their support if we are to continue to be able to pursue our sport freely.

It's really surprising how many non-hunters are uninformed about our sport. I have met several people who think hunters just kill their quarry for the fun of it, and just leave it lie to rot in the woods. Oh, they are so wrong. They confuse hunters with poachers. It is this kind of thinking we must change.

Since I moved from Virginia last year, I have continued my subscription to your magazine and will into the future. Keep up the good work! My only concern is that if this magazine is subsidized by Virginia hunters and fishermen, aren't out of state subscribers like myself getting off easy on the price of the subscription? I know that I would certainly be willing to pay more for this fine magazine. I wish the Indiana Division of Fish and Wildlife, which I am a part of, had a magazine like yours!

Joe Tousignant
Avoca, Indiana

I was curious about the letters in the November issue from frustrated subscribers claiming that you publish too many hunting articles. In that

very issue there were only two such articles. But, take heart: having just moved here from Kentucky, I am one of your newest subscribers, replacing at least one of the discontents.

I find *Virginia Wildlife* fascinating and informative. I particularly appreciated the December article by Mike Fies on how to deal with anti-hunting groups. And the November feature on black powder guns was fascinating. My 84-year-old grandfather started building muzzle loaders at 80 (from scratch, except the barrel). He has made about 15 rifles and several pistols to date, and the whole Harton clan and several fans hunt with them each year. His workmanship has won ribbons at the Kentucky State Fair.

So you see, you have a new fan here! Keep up the good work.

Dr. R. Michael Harton
Midlothian

Harry Murray's article, "Buy the Right Stuff" from your January issue came as close as anything else I've read at helping me equip myself properly. Unfortunately, I'm not sure that I'd know a size 10 fly if it were caught in the back of my head. Yes, I give my fly fishing accomplishments away too easily; I agree. I've learned that one can make some very expensive mistakes in the quest for appropriate gear, so the article wetted my appetite and I have vowed to do my research and be ready in the spring. I applaud your publication and hope that the high quality we've grown accustomed to is not an endangered species due to accountant encroachment or other budgetary anomalies. More Harry Murray.

W. G. Suter, Jr.
Manassas Park

You deserve a pat on the back for the Dec. '90 article, "War of the Woods." This article accurately informed *Virginia Wildlife* readers about anti-hunters, that they have no factual basis behind their statements. It's articles like these that will keep the challenging sport of hunting alive. Many hunters, like myself, would like to see more of these articles in your publications. Thanks a lot!

Graham Gerhardt
Lynchburg

Safety

Overloading Is Dangerous

by William Antozzi, Boating Safety Officer

Last month in this column, I reported on the drowning of two persons whose boat capsized because of possible overloading or improper weight distribution. Coast Guard regulations require capacity plates, which show maximum capacities, in monohull boats less than 20 feet in length (except sailboats, canoes, kayaks, inflatables, etc.). The capacity plates show the maximum number of occupants at an average of 160 pounds per person and the total allowable weight. The maximum allowable motor horsepower for outboard motors is shown because, unlike inboard engines, outboards can be changed. The plates show the maximum number of persons who may be carried, rather than total weight alone, because it is easier for average boaters to comprehend. The assumed weight of the average person was set at 160 pounds by the Coast Guard, because the weight of the average person used in industry standards, international standards, and state laws range from 150 to 165 pounds.

The capacity formula applies to different types of boat. Because of the variations in boat size and the resulting loading capacities, it is imperative that the formula apply equally to all boats without unduly allowing excessive capacities for certain other boats, which could be hazardous.



Never overload a boat! Photo by Spike Knuth.

In a typical boating outing there is usually a combination of adults and children, indicating that there must be some adjustment in the number of persons that may be carried. The typical group on a boating outing is three to four persons as indicated in surveys conducted by the Coast Guard. This group is typically a boating family of two adults and one or two children. Therefore, the typical family would not have a weight average of 160 pounds per person. In order to take those factors into consideration, the Coast Guard came up with a formula which involves adding 32 pounds to the person capacity in

pounds, dividing the result by 141 and rounding off the answer to the nearest whole number.

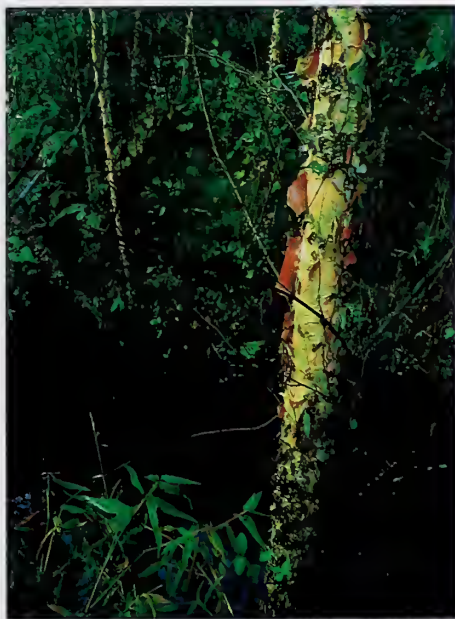
Under the formula adopted, a boat that has a maximum person capacity of 500 pounds has a total person capacity of four. Some existing state laws require dividing the 500 pounds by the average weight of a person and displaying a fraction of a person on the capacity label. In one example, using 160 pounds for a person, the result was approximately 3.12 person. This result discriminated against the typical boating family of two adults and two children whose combined weight would not normally exceed 500 pounds. The Coast Guard does not believe that permitting a typical boating family of four persons in a boat with a 500 pound person capacity will adversely affect boating safety.

On the other hand, a small boat with a total person capacity of 320 pounds is not allowed to carry more than 2 persons. The Coast Guard believes that the small lightweight boats with total person capacities of 320 pounds cannot safely accommodate three persons, even if one or more of the persons is a child. The small lightweight boats are generally very unstable, have very little freeboard and are easily affected by the motions of persons on board. □

Habitat

River Birch

by Nancy Hugo



River birch; photo by Nancy Hugo.

This is the start of my campaign to get the river birch the respect it deserves. No more will it be upstaged by the dramatic paper birch, displaced by the exotic European white birch, or confused with other birches sharing the common name “black birch.” From this day forth, let *Betula nigra* be known as “river birch,” and let it be recognized as one of Virginia’s finest trees.

It’s the white and silvery barked birches that usually get all the attention. The bark of the European white birch and of the paper birch is striking, but the bark of our familiar river birch, the only birch that occurs naturally at low altitudes in the southeastern United States, is just as beautiful once you’ve learned to appreciate it. On riverbanks, streambanks, and in wet bottomlands, look for the

shaggy bark of these trees that often occur in colonies. Although each tree seems to have its own palette of bark colors, a streambank lined with river birches is a study in grey, salmon-pink, and cinnamon. Where the peeling outer bark curls back to reveal the smooth new inner bark, sometimes this inner bark is the color of an underripe pumpkin.

Why Virginia homeowners plant exotic birches when they might grow native river birches is a mystery to me—especially since the river birch is the most trouble-free birch. Birches in general are the Typhoid Mary of trees—they’re prone to leaf spot, leaf blister, leaf rust, canker, dieback, wood decay mildew, leaf miner, and bronze birch borers. River birches resist most of these diseases, and they’re a natural for fertile, wet spots similar to their native habitats. I’m told they’ll also survive in dry soils, although they won’t reach their maximum size there. River birches are typically 40-70’ tall, although one giant grows to 95’ in the Cumberland State Forest. There’s even a “new and improved” river birch call the ‘Heritage’ birch that is more ornamental than the species and reportedly grows 50 percent faster.

River birches are easy to transplant. Plant them in groups—they’re sociable, not solitary, or turn a single sapling into a clump by cutting it back at the base; several stems will resprout from the base.

Birches, like their close cousins the alders, bear both catkins and small cones. These seed-bearing cones are one of the reasons birches are recommended for backyard habitats—they attract a different group of birds than plants that bear fruits or berries. According to naturalist John Dennis, chickadees, nuthatches, and most finches respond more readily to winged seeds than they do to fruits. With small trees like river birches as

well as berry-bearing shrubs in the yard, you’ll attract a greater variety of birds than you would with either of them alone.

The feathery branches of birches also make better nesting sites than you might expect. Hummingbirds, vireos, and goldfinches are among the birds you may find nesting among the inner twigs and branches of birches. In my never-ending search for information favorable to river birches, I’ve also recently learned that birches are among the main larval foods of luna moths—the enormous green moths that are sometimes attracted to back porch lights on summer nights.

The river birch is one of six birches native to Virginia. One of them, the round leaved birch (*Betula uber*), is Virginia’s rarest tree. Thought extinct until it was rediscovered in the 1970s, it occurs on only one site in Smyth County. Other than river birches, our most frequently occurring birches are cherry birches (*Betula lenta*) and yellow birches (*Betula allegheniensis*). With ranges that extend into Virginia from the north, cherry birches and yellow birches generally occur in the eastern part of the state and at higher elevations than river birches.

In the wild, no one is likely to confuse *Betula nigra*, the river birch, with *Betula lenta*, cherry birch, but their names can be confusing because the common name “black birch” is sometimes applied to them both. The confusion is compounded by the fact that it’s the river birch, *Betula nigra*, whose species name *nigra* means black, but it’s the sweet birch’s bark that’s the blacker of the two. Help end the confusion by calling neither of them black. Help my campaign to elevate the status of the river birch by calling at least one of them (make it the river birch) your new favorite birch. □

Recipes

It's Spring—Serve Shad

by Joan Cone

Early spring is when the greatest run of American shad ascends our Virginia coastal rivers to spawn in fresh water. While two species of shad, the American and the hickory, are of interest to fishermen, the American shad is better eating. It is also the larger, weighing between 1½ and 8 pounds. The hickory runs 1 to 3 pounds. The roe, however, from both species is equally delicious.

Menu:

Tomato-Yogurt Soup
Baked Shad

or

Sauteed Shad Roe
Microwave Cheese Grits
Broccoli Bake
Frozen Strawberry Yogurt

Tomato-Yogurt Soup

1 cup plain nonfat yogurt
2 tablespoons tomato paste
1 can (48 ounces) V-8 juice
Juice of 1 lemon

Freshly ground pepper

1/4 cup finely chopped cilantro

Put yogurt in large bowl with tomato paste and gradually whisk in enough V-8 juice to thin it out smoothly. Add lemon juice, black pepper and cilantro. Add remaining V-8 juice and combine well. Chill. (Makes 8 servings)

Baked Shad

1 (3 to 4 pound) American shad
Salt
Lemon slices
Paprika

Preheat oven to 350 degrees. Line a 2-inch deep roasting pan with aluminum foil. Place shad in



Baked shad; photo by Joan Cone.

pan and salt cavity and both sides. With a sharp knife make slits part way through one side of fish. These slits allow oil to seep out during baking. The slits can then be used after cooking for cutting shad into serving pieces. Place a thin slice of lemon in each slit and sprinkle top of fish with paprika. Bake shad for 1 hour or until fish flakes easily when tested with fork. Serves 3 or 4.

Sauteed Shad Roe

Fry enough bacon allowing one or two pieces per person. Leave just enough fat in frying pan to cover bottom. Dust roe lightly and gently with flour. Place roe in hot bacon fat and brown well. Turn, using a spatula, and brown on the other side and then allow to cook until eggs appear done. Place roe on platter with strips of cooked bacon and wedges of lemon. Allow 1 small pair of roe or ½ of large pair per person.

Microwave Cheese Grits

2 2/3 cups hot water
2/3 cup quick-cooking grits

3/4 teaspoon salt
1 tablespoon butter or margarine
1 cup (4 ounces) shredded Cheddar cheese

Combine water, grits and salt in a 2-quart casserole. Microwave at High for 9 to 10 minutes, stirring after 5 minutes. Add butter and cheese, mixing well. Microwave at High for 1 minute or until butter and cheese melt; stir well. Makes 4 to 6 servings.

Broccoli Bake

1 can (10¾ ounces) cream of broccoli soup
1/2 cup milk
1 teaspoon soy sauce
Dash pepper
2 packages (10 ounces each) frozen broccoli spears, cooked and drained
1 can (2.8 ounces) French fried onions.

Combine soup, milk, soy sauce and pepper. In a 10 X 6-inch baking dish, layer ½ the broccoli, ½ of the soup mixture and ½ can of the onions. Top with remaining broccoli and soup mixture. Bake at 350 degrees for 25 minutes. Top with remaining onions; bake 5 minutes longer. Serves 4 to 6.

Frozen Strawberry Yogurt

2 cups fresh strawberries, sliced and frozen overnight
6 tablespoons sugar
1/2 cup plain nonfat yogurt

Place frozen, sliced strawberries and sugar in processor; process until finely chopped. Add yogurt and blend for 2 minutes. Pour into a cold bowl and freeze. Serves 4.

Note: This recipe can be doubled easily. □

Photo Tips

Getting Into Wildlife Photography

by Lynda Richardson



Lynda Richardson and friend; photo by Tim Wright.

This is the first of a series of monthly columns on wildlife photography written by Lynda Richardson, a professional wildlife photographer whose work appears regularly in Virginia Wildlife magazine.

There are three things you need to do if you want to get into wildlife photography. First, you need to learn about your wildlife subjects. Second, you need the proper camera equipment. Finally, you need to know how to use that equipment.

When I want to photograph a specific animal, I start by learning about it. I read pertinent material in magazines and books at home or at the local library. I also tag along with biologists and researchers because their field work gives them first-hand animal knowledge which they can pass on to me. This collective information is invaluable, because without it, a lot of time, energy and film may be spent looking in the wrong place at the wrong time. The more I know about my subject, the better my chances of successfully photographing it.

An important resource to have is a collection of identification books. I take these with me everywhere for on-the-spot identification of animals or plants. The Audubon Society and Peterson Field Guide series are very

good, and when photographing in a foreign country, I always try to pick up local I.D. books. These books contain a quick summary of animal information such as home range, habitat preferences and breeding seasons.

As you learn about your animal subjects, begin to collect the equipment you'll need to photograph them. If you are just beginning in wildlife photography, start slow when choosing equipment. You don't need every gadget made to get great shots. I suggest starting with a sturdy 35mm camera with full manual capabilities (I use Canon lenses, F-1 and T-90 cameras.) If you enjoy shooting close-ups of flowers or insects, consider a 100mm or 200mm macro lens. If you want to shoot larger wildlife, select the biggest and brightest telephoto you can afford. I suggest starting with a good 300mm in the \$300 to \$500 range.



"After watching a group of whitetails for several days, I waited for a buck to crest a ridge so I could photograph him as a silhouette against the setting sun;" photo by Lynda Richardson.

After purchasing a dependable camera and lenses, invest in a good, sturdy tripod. It's the one purchase you can use with any camera and it can last a lifetime. I use a Gitzo tripod and an Arca-Swiss ball head with quick-release plates. The Arca-Swiss head is the smoothest maneuvering head I've found and the quick-release plates, attached to different cameras or lenses, allows fast, easy changes.

Since film is the cheapest part of wildlife photography, don't be afraid to shoot a lot of film. Some people think shooting numerous frames of the same image wastes film, but I disagree. When careless processing at the lab results in scratches, multiple images can be a saving grace—perhaps there is one undamaged image you can use.

My clients prefer slide film over print film because of its top-notch ability to be reproduced in books and magazines. So, I use professional Kodachrome 64, Fujichrome 50 and Fujichrome Velvia slide films. Kodachrome 64 is a good all-around film. In early morning or late afternoon light, I think it best portrays authentic color. Fujichrome 50 and Fujichrome Velvia, because they intensify color, are fantastic for rainy, overcast days or any situation in which light and color are muted.

Wildlife photography is a lifelong learning experience. As you become familiar with your equipment, your photo expertise will improve. And as you learn about wildlife, you'll be able to capture little bits of the natural world on film.

If you have any questions about wildlife photography, please feel free to write: Wildlife Photography Column, c/o Virginia Wildlife magazine, P.O. Box 11104, Richmond, VA 23230-1104. I will try to answer as many questions as possible in upcoming columns. □

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Proceedings of the Symposium on Virginia's Endangered Species
Virginia Tech, April 28-29, 1989

Sponsored by
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This 18" X 24" full-color poster was originally designed to grace the cover of the proceedings of the 1989 Virginia Endangered Species Symposium, and is now available and ready to frame for \$8, including shipping and handling.

Send \$8 for each poster ordered in a check made payable to the Treasurer of Virginia to: Virginia Endangered Species Poster Offer, Attn. Diane Davis, VDGIF, P.O. Box 11104, Richmond, VA 23230-1104. **Special discount:** Save \$3 shipping and handling charges! Come by our Richmond office at 4010 West Broad Street (phone 804/367-1000) and pick up the posters for only \$5 each.

Family Outdoors

Foot Notes

by Carl "Spike" Knuth

Did you ever wonder why a bird doesn't fall off of its perch when it's asleep? Or why there is such a variety of shapes and sizes of feet in the bird world? The legs and feet of birds are quite amazing. While birds' legs and feet have some of the same anatomical features as humans, they are constructed and located uniquely. Birds actually walk and grasp with their toes. The long shank part that we think of as the bird's leg is really its foot! What we might think is the bird's knee, with a reverse bend, is really its heel and ankle! The bird's real "knee" structure is hidden up under its feathers.

The overall construction of a bird's feet is perfect for perching, running, swimming, wading, climbing, grasping, tearing or scratching. Each is designed perfectly for where the bird lives and how it uses them. Bird feet are constructed of three single, rigid bones with joints that work in opposite directions. Serving as shock absorbers, they actually cushion the bird's landings.

Most birds have four toes, although shorebirds have only three, with a nub of a back toe higher up the back of each foot if they have any at all. Shorebirds spend their time running around on mudflats and sand spits and a back toe would probably be a hindrance. Most perching birds have three toes forward and one toe back for gripping twigs and stems.

Birds have tendons which run the length of their "feet." When a bird perches, its knees and ankles bend and automatically tighten this tendon which has projections that mesh lock much like a ratchet, contracting the bird's toes so they grip tightly. The bird's toes and the bird itself are actually locked tight to their perch.

Birds of prey have strong feet with sharp, hooked talons such as the os-

prey and the peregrine falcon. The osprey has spicules, or foot pads, on the bottoms of its toes. Being like coarse sandpaper, it helps them to catch and hold slippery fish. The peregrine falcon has a strong hind toe with a large claw. It is able to make a fist with which it knocks its prey senseless on its power dives. The prey is knocked to the ground disabled enough so the falcon can come back to it and make the kill if it wasn't accomplished on the first blow.

Ospreys and owls have the capability of turning one of their front-facing toes backwards for better gripping power. The feet of climbing birds like parrots, cuckoos and woodpeckers, normally have two toes forward and two toes back. These "yoke-toed" birds can crawl around and hang upside down or cling to the side of a tree or branch. Chimney swifts, the short little birds with the narrow, fluttering wings that some people mistake for bats, have all four toes pointing forward to help them hang vertically on the insides of chimneys and to their stick nests.

Wading birds like herons, egrets, bitterns and ibises, have long, slender legs for walking in water. This allows them a high vantage point to spot small fish or frogs on which they feed and stay dry, too. Of course, swimming birds have webbed feet. Waterfowl, cormorants, mergansers, loons, pelicans and gulls have fully webbed feet because they spend most of their time in the water.

There are variations of webbed feet as well. Some plovers and sandpipers have partial webs, known as "semi-palmated," because they sometimes are put in a swimming situation in their respective habitats. Grebes

and coots have lobed toes. They serve the birds perfectly well in swimming and diving as well as being able to crawl around in the thick marsh vegetation. The lobes are like flaps. On a forward motion, they fold down around the toes to eliminate resistance, but flare out to present a rigid surface on the bird's backward power strokes.

Gallinules have long, slender toes for stepping over floating aquatic vegetation. A Mexican species, the jacana, has especially long toes which serve to distribute the bird's weight so it won't sink.

Birds that scratch on the ground for food like turkeys, quail, towhees and white-throated sparrows have relatively short, thick toes with stout, blunt claws for scratching. Some birds have feet covered with feathers. For owls, this is a silencing feature as well as for insulation. The rough-legged hawk, a hawk that breeds in the Arctic and spends much of its time in the tundra, has feathered feet to protect them. This hawk's feet and toes are smaller than other hawks. The trees in the Arctic are stunted, lower and smaller, so the rough-legged's toes are more suitable for gripping and perching in smaller branches.

Some birds actually grow snowshoes. The ruffed grouse develops hair-like appendages growing out from the sides of its toes. Shortening daylight hours in winter apparently affects the bird's pituitary gland which triggers the growth of the "snowshoes," aiding the grouse in walking over soft snow by supporting its weight.

The legs and feet of birds show a wide array of shapes, sizes and variations. Each type—like a special tool—shows design for a particular purpose and each does its job perfectly. □

